



**General Instructions:**

1. 15 minutes prior reading time allotted for question paper reading.
2. The question paper contains 4 sections –  
READING SKILLS, WRITING SKILLS, GRAMMAR and LITERATURE TEXTBOOK.
3. Attempt questions based on specific instructions for each part.

**SECTION A: READING SKILLS (22marks)**

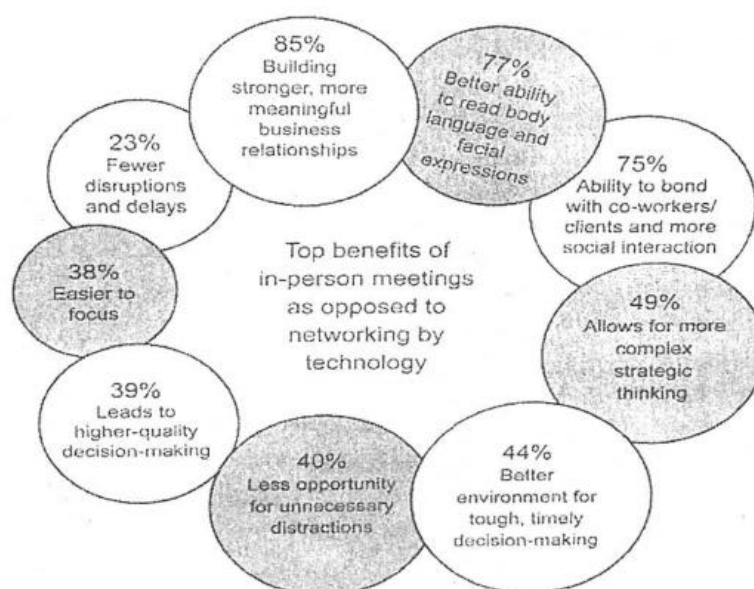
**1. Read the following passage carefully:**

1. If this universe is the outcome of a desire, how can its essential ingredients like us be free from desire? Desire, however, is the root cause of all mental stress because we associate stress with the non-fulfilment of desires.
2. Abraham Lincoln used to say that behind every act of man there is always a selfish purpose. There were many who disagreed with him. One late night, while returning from a meeting he heard wild shrieks from the roadside. He asked the coachman to stop, and he got down to see what was happening. He saw a pig struggling and squealing to free itself from a muddy ditch. President Lincoln reached out and rescued the pig. In the process he soiled his shoes and trousers but seemed quite satisfied to see the pig free again. When he settled back in the coach, his aide asked him if there was a selfish purpose behind this act too. Lincoln promptly replied that had he gone home without rescuing the pig he would have kept tossing in bed thinking of what might have happened to that pig. So by rescuing the pig he had earned himself a good night's sleep albeit, Lincoln was a good human being and that was why he desired to save the pig but as soon as this desire crept into his mind, the fulfilment of the desire became his own primary concern.
3. Stress can be both physical and mental. A workout at the gym, a game or two of tennis or a jog in the morning can stress one physically. Similarly, a game of chess, listening to sad songs or watching a sad movie can stress you mentally. But in such cases you stress yourself willingly and they bring satisfaction. The ill effects of stress begin when you overwork or tire yourself beyond acceptable limits irrespective of whether you did it willingly or not. As far as physical stress is concerned, the problem is easily resolved. Aching muscles send you signals, and one decides to slow down or rest or avoid playing those extra games in future.
4. Mental stress, however, is a different story. If ignored and you do not care to find out why and how you created it, then it can lead to hypertension, blood pressure, diabetes, forgetfulness, anger, fear etc. Take for example a budding young executive who sets a goal to become a multi-millionaire. He must stress himself physically and mentally but why complain? After all it is his own desire. When we stress ourselves for the fulfilment of our desires, we must take the responsibility for it. Stress is not caused by people or situations; it is your response to them.

**Answer the following questions based on the passage above.**

1. (i) According to the writer the root cause of stress is \_\_\_\_\_. (1)  
(a) desire (b) greed (c) money (d) food
- (ii) How could have Lincoln felt after saving the pig? (1)  
1. Relieved 2. Happy 3. Sad 4. Angry 5. Satisfied  
(a) 1, 2 and 4 (b) 2, 3 and 4 (c) 1, 2 and 5 (d) 3, 4 and 5
- (iii) Find appropriate words from the passage to fill in the blanks. (1)  
When Lincoln saved the pig, it was \_\_\_\_\_ first and then the \_\_\_\_\_ for the desire. (Paragraph 2)
- (iv) Substitute the underlined phrase in the following sentence with a word/phrase from Paragraph 4. (1)  
An upcoming manager in a corporate setup has achieved immense fame.
- (v) Identify the correct sentence from the given options which has the similar connotation of the usage of the word 'soiled' in the given passage. (Paragraph 2) (1)  
(a) The politician's actions **dirtied** his reputation irreparably.  
(b) The storm **dirtied** the pristine beaches with debris.  
(c) The scandal **dirtied** the company's image in the public eye.  
(d) The footballers **dirtied** their jerseys playing in the mud.

- (vi) Identify the correct phrase from **Paragraph 3** to replace the following sentence. (1)  
*When the body is tired it communicates with us.*
- (vii) Complete the sentence appropriately. (1)  
 The title of the passage, 'Managing Desires' is inappropriate because \_\_\_\_\_.
- (viii) Say whether the following statement is **TRUE** or **FALSE**. (1)  
*Our body's response is what causes stress.*
- (ix) List 2 reasons for Lincoln saving the pig. (2)
- (x) What are the differences between stress willfully acquired and that unintentionally acquired? (2)
2. On the basis of a survey conducted for determining the effectiveness of **offline meetings vis-à-vis online meetings**, information in support of offline meetings has been obtained and the same is represented in the chart below.



**Answer the following questions based on the above data.**

- (i) Which reason in support of **offline meetings** is given by maximum percentage of people? (1)
- (ii) Select the correct option to fill in the blank and complete the analogy. (1)  
 Networking: \_\_\_\_\_ : : Saving money : Online  
 (a) Motivating (b) In person (c) Money (d) Fun time
- (iii) What percentage of the surveyed population feels that online meetings build stronger and meaningful business relationships? (1)
- (iv) Rank the following survey results in increasing order of percentage. (1)  
 (a) Better environment for tough timely decision making.  
 (b) Fewer disruptions and delays.  
 (c) Easier to focus.  
 (d) Building stronger more meaningful business relationships.  
 1. b, a, c, d      2. b, d, c, a      3. b, c, d, a      4. None of these
- (v) Which reason has been quoted by 77% of people in favour of **online meetings**? (1)
- (vi) Select the correct option that represents the data in descending order. (1)  
 (a) 49 percent, 39 percent, 44 percent, 38 percent.  
 (b) 39 percent, 44 percent, 38 percent, 49 percent.  
 (c) 49 percent, 44 percent, 39 percent, 38 percent.  
 (d) 39 percent, 38 percent, 49 percent, 44 percent.
- (vii) Which of the following statements is **False**? (1)  
 (a) 23% of people feel that offline meetings have fewer disruptions and delays.  
 (b) 25% of people feel that online meetings enable bonding with co workers / clients and more social interaction.  
 (c) 44% of people feel that online meetings offer a better environment for tough, timely decision making.  
 (d) All of these.
- (viii) Find at least two words from the above chart which rhyme with the word "Attraction". (1)
- (ix) Identify the factor in favour of offline meetings which is supported by 40% of people and give one probable reason for the same. (2)



### SECTION B : WRITING SKILLS (22 marks)

3. You are Satvik/ Satvika of Modern International School, Mumbai and have taken admission in Class 11. You took the Science stream, but after attending classes for a few months, you find it unsuitable for you to continue in the Science stream and wish to take up Humanities. Write an e-mail in about **50 words** to the Principal of your school, seeking permission for the same. Give at least two valid reasons for why you want to change your stream. (3)

You may copy the given template to write your email.

<b>from :</b>	
<b>to :</b>	
<b>Cc :</b>	
<b>date :</b>	
<b>Subject :</b>	

4. Write a factual description in about **100 words** of a new smartphone that you bought recently. (4)
- 5 (a) Several neurologists have been advocating the view that working on computers is beneficial to youngsters as it improves motor skills and provides stimulus to the brain. Write a letter to the Editor of **Health Matters** in not more than **120 words** on the need to introduce computer skills as a compulsory subject in secondary classes. You are Sharad /Suman of Bhagirath Public School, Palam Village, New Delhi. You can take ideas from your **MCB, Unit 1- Health and Medicine**. (7)

OR

- (b) You are Shubham/ Shubhi Tyagi of 1, Ashok Road, Lucknow. You are deeply concerned about the increasing number of road accidents in your area. You strongly feel that reckless driving by youngsters is the primary cause of such accidents. Write a letter to the Traffic Police Commissioner in not more than **120 words** requesting him to take prompt and appropriate action and request him to educate youngsters regarding this serious matter. Give concrete suggestions to deal with the problem. You can take ideas from your **MCB, Unit 2 – Education**.
- 6 (a) Many big research firms and business tycoons across the world are exploring the possibility of 'Space Tourism'. Is it something scientifically feasible? Write an article in not more than **150 words** for your school magazine on the topic 'Science and Technology', highlighting the advantages and disadvantages of making space travel available for the people as a tourism option. Use the given cues along with the ideas you may have gathered from **MCB Unit - 3 Science**. (8)

- Is space tourism an option to consider when people are considering different destinations to travel to during vacation?
- What can one learn from such travel?
- How will it affect space if the traffic increases?
- Should this kind of travel be encouraged?
- What will be the financial implications of such travel?

OR

- (b) Saving the environment has become a hot topic of discussion, debate and seminars, but nothing seems to be really changing. The temperatures are rising and it is a matter of concern. Write an article in not more than **150 words** for the school magazine stressing on the need for action at individual, family and state level to address this issue. Use the given cues along with your own ideas that you have gathered from **MCB Unit - 4 Environment**.

- How is the environment getting degenerated?
- What steps have been taken till now?
- Why are these inadequate?
- What must be done to arrest some of the changes?
- What interventions can individuals plan?
- What can families do?
- Will such small steps be enough?
- What role does the state need to play here?

### SECTION C : GRAMMAR (10 marks)

7. Complete the tasks A to C, as directed.

(A) Fill in the blanks with the appropriate option from those in the brackets. (3)

The truck travelled South, where Manik (i) \_\_\_\_\_ (finds, found, has found, had found) a deserted spot to hide it. We would be fine so long as no one found the truck or connected (ii) \_\_\_\_\_ (in, on, with, by) the robbery. It would be (iii) \_\_\_\_\_ (one, the, a, an) mystery why black market thieves had simply abandoned such precious booty.

Contd...4

- (B) In the following paragraph there is one error in each line. Identify the incorrect word and write the correct word as shown below. The first one has been done as an example. (4)

	Error	Correction
Eg. The Louvre is a world's largest	Eg. : (a)	the
(a) and old museum. It is located	(a) _____	(a) _____
(b) along the banks of the Seine River by Paris, France.	(b) _____	(b) _____
It is also called the Grand Louvre.		
(c) It is the world's most visiting museum.	(c) _____	(c) _____
(d) It attracted tourists from all over the world.	(d) _____	(d) _____

- (C) Do as directed. (3)

- (i) Rearrange the following jumbled words/phrases in the given dialogue to create a meaningful sentence.

Sonia : How are you, Manvi?

Manvi : I am fine.

Sonia : What are you doing this weekend?

movie / but / mind / any special / going / I don't / for a / plans/ have/ would not/ out

- (ii) Report the dialogues to complete the paragraph that follows.

Dr. Anil : How are you feeling after you have taken this medicine ?

Anita : I'm feeling much better except a little weakness.

Dr. Anil asked Anita (a) \_\_\_\_\_. To this Anita replied (b) \_\_\_\_\_ except a little weakness.

#### SECTION D: LITERATURE TEXTBOOK (26 marks)

8. Read the given excerpts and answer the questions briefly, for ANY TWO excerpts of the three given. (4+4=8)

- (A) *Not marble, nor the gilded monuments*

*Of princes, shall outlive this powerful rhyme;*

*But you shall shine more bright in these contents*

- (i) Why do Princes get monuments made?
- (ii) Why won't the monuments outlive this rhyme?
- (iii) Why is the rhyme called powerful?
- (iv) Which poetic device is used here in the last line?

- (B) *"Well we'll think about it after tea, and then we'll look through his bits of things and make a list of them. There's all the furniture in his room."*

- (i) Who is the speaker of the above lines?
- (ii) What does 'it' in the above lines mean?
- (iii) Find out a phrase from the above lines to replace the word 'observe'.
- (iv) What does this show about their attitude towards grandfather?

- (C) *At last, he came again, but it was a struggle for him to breathe and on his face were clear signs of approaching end. That day he could not contain his impatience.*

- (i) Why was it a struggle for him to breathe?
- (ii) Why couldn't he contain his impatience?
- (iii) Find out a word from the given lines to replace the word 'restiveness'.
- (iv) Where had he come again?

9. Answer ANY FIVE of the following six questions in about 30 to 40 words each. (5x2=10)

- (i) Do you agree that Miss Mebbin loved money more than anything else? Give two reasons.
- (ii) Why did the ghosts organize the 'Writer's Inspiration Bureau'? What was their mode of working?
- (iii) What do you get to know about the sculptor from the poem Ozymandias?
- (iv) In what way did the villagers help Mrs. Packletide shoot the tiger?
- (v) Do you think the narrator liked writing ghost stories? Give at least 2 examples from the text for the same?
- (vi) According to you what kind of a king was Ozymandias?

10. Answer ANY ONE of the following two questions in about 150 words. (8)

- (A) How do the characters in the 'Frog and the Nightingale' and 'The Dear Departed', exploit the vulnerability of others for their own gain? What are the consequences of their actions?

OR

- (B) How do the two stories 'The Two Gentlemen of Verona' and 'The Letter' depict the theme of sacrifice and patience.





## सामान्य निर्देश :

- ❖ इस प्रश्न-पत्र में चार खंड हैं – खंड 'क', 'ख' 'ग' और 'घ'
- ❖ खंड 'क' में अपठित गद्यांश से प्रश्न पूछे गए हैं, जिनका उत्तर दिए गए निर्देशों का पालन करते हुए दीजिए।
- ❖ खंड 'ख' में व्यावहारिक व्याकरण से प्रश्न पूछे गए हैं, आंतरिक विकल्प भी दिए गए हैं।
- ❖ खंड 'ग' पाठ्यपुस्तक पर आधारित है, निर्देशानुसार उत्तर दीजिए।
- ❖ खंड 'घ' रचनात्मक लेखन पर आधारित है, आंतरिक विकल्प भी दिए गए हैं।
- ❖ प्रश्न पत्र में कुल 16 प्रश्न हैं, सभी प्रश्न अनिवार्य हैं।
- ❖ यथासंभव सभी खंडों के प्रश्नों के उत्तर क्रमशः लिखिए।

## खंड-क

प्रश्न 1. निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर इसके आधार पर पूछे गए प्रश्नों के उत्तर लिखिए – (7)

संस्कृतियों के निर्माण में एक सीमा तक देश और जाति का योगदान रहता है। संस्कृति के मूल उपादान तो प्रायः सभी सुसंस्कृत और सभ्य देशों में एक सीमा तक समान रहते हैं, किंतु बाह्य उपादानों में अंतर अवश्य आता है। राष्ट्रीय या जातीय संस्कृति का सबसे बड़ा योगदान यही है कि वह हमें अपने राष्ट्र की परंपरा से संपृक्त बनाती है, अपनी रीति-नीति की संपदा से विच्छिन्न नहीं होने देती। आज के युग में राष्ट्रीय एवं जातीय संस्कृतियों के मिलन के अवसर अति सुलभ हो गए हैं, संस्कृतियों का पारस्परिक संघर्ष भी शुरू हो गया है। कुछ ऐसे विदेशी प्रभाव हमारे देश पर पड़ रहे हैं, जिनके आतंक ने हमें स्वयं अपनी संस्कृति के प्रति संशयालु बना दिया है। हमारी आस्था ढिगने लगी है। यह हमारी वैचारिक दुर्बलता का फल है।

अपनी संस्कृति को छोड़, विदेशी संस्कृति के विवेकहीन अनुकरण से हमारे राष्ट्रीय गौरव को जो ठेस पहुँच रही है, वह किसी राष्ट्रप्रेमी जागरूक व्यक्ति से छिपी नहीं है। भारतीय संस्कृति में त्याग और ग्रहण की अद्भुत क्षमता रही है। अतः आज के वैज्ञानिक युग में हम किसी भी विदेशी संस्कृति के जीवंत तत्वों को ग्रहण करने में पीछे नहीं रहना चाहेंगे, किंतु अपनी सांस्कृतिक निधि की उपेक्षा करके नहीं। यह परावलंबन राष्ट्र की गरिमा के अनुरूप नहीं है। यह स्मरण रखना चाहिए कि सूर्य कि आलोकप्रदायिनी किरणों से पौधे को चाहे जितनी जीवनशक्ति मिले, किंतु अपनी जमीन और अपनी जड़ों के बिना कोई पौधा जीवित नहीं रह सकता। अविवेकी अनुकरण अज्ञान का ही पर्याय है।

1. राष्ट्रीय संस्कृति की हमारे प्रति सबसे बड़ी देन क्या है ? (1)

- (क) वह हमें अच्छा नागरिक बनाती है।
- (ख) वह हमें देशभक्ति सिखाती है।
- (ग) वह हमें अपने राष्ट्र की परंपरा और रीति-नीति से जोड़े रखती है।
- (घ) वह हमें दुश्मनों से लड़ना सिखाती है।

2. निम्नलिखित कथन और निष्कर्ष को ध्यान से पढ़कर दिए गए विकल्पों में से कोई एक सही विकल्प चुनकर लिखिए।

कथन : हम अपनी सांस्कृतिक संपदा की उपेक्षा नहीं कर सकते।

निष्कर्ष : ऐसा करने से हम जड़ विहीन पौधे के समान हो जाएंगे। (1)

- (क) कथन सही है, लेकिन निष्कर्ष गलत है।
- (ख) कथन और निष्कर्ष दोनों सही हैं।
- (ग) कथन गलत है और निष्कर्ष सही है।
- (घ) कथन और निष्कर्ष दोनों गलत हैं।

3. अज्ञान का पर्याय क्या है ? (1)

- (क) अविवेकी संस्कृति (ख) अविवेकी संस्कार (ग) अविवेकी ज्ञान (घ) अविवेकी अनुकरण

4. आधुनिक युग में संस्कृतियों पर परस्पर संघर्ष प्रारंभ होने का प्रमुख कारण बताइए। (2)

5. हम अपनी संस्कृति के प्रति शंकालु क्यों हो गए हैं ? (2)

प्रश्न 2. निम्नलिखित गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर लिखिए— (7)

सड़क मार्ग से हम आगे बढ़े और सरयू पुल पर बस्ती जिले की सीमा में प्रवेश किया। हमारा पहला पड़ाव कुशीनगर था मगर हम कुछ देर मगहर में रुके जो कबीर की निर्वाण भूमि है, मगर लोगों की फिरकापरस्ती ने उनकी सारी मेहनत पर पानी फेर दिया है और उन्हें मंदिर और मकबरे में बाँट दिया है। मठ के महंत ने हमारे भोजन की व्यवस्था की और आस-पास के स्कूल और कॉलेज की लड़कियों से मुलाकात भी कराई। उनसे बातचीत करके हमने जाना कि अब स्थितियाँ बदल गई हैं। अब लड़कियों की पढ़ाई और नौकरी पर ध्यान दिया जाता है मगर उनमें सामाजिकता का लोप सा हो गया है। अब ब्याह और मरनी-हरनी में एका नज़र नहीं आती। गीतों की बात चली तो वहाँ मौजूद पचास-साठ लड़कियों में से किसी को भी लोकगीत याद नहीं थे।

वहाँ से हम कुशीनगर पहुँचे। रात घिरने लगी थी मगर हम पंडरी गाँव के लोगों से मिले। कुशीनगर से लगभग बीस किलोमीटर होने पर भी यहाँ विकास का एक कण भी नहीं पहुँचा था, मगर यहाँ के युवा सजग हैं, वे स्वप्रयास से स्कूल भी चलाते हैं। रात को हम बौद्ध मठ में ठहरे। यह मठ किसी शानदार विश्रामगृह से कम नहीं था। सुबह हम केसरिया गाँव गए। सामाजिक और पारिवारिक विघटन के इस दौर में एकमात्र संयुक्त परिवार वहाँ मिला। हमने उनसे बात की। उस परिवार की सबसे बुजुर्ग महिला के पास तीज-त्योहार, गीत-गवर्नई की अनुपम थाती थी मगर उनसे सीखने वाला कोई नहीं था। नई पीढ़ी लोक-संस्कृति से विरत थी।

1. कबीर की निर्वाण भूमि कौन-सी है ? (1)  
(क) बस्ती (ख) कुशीनगर (ग) मगहर (घ) पंडरी
2. निम्नलिखित कथन (A) तथा कारण (R) को ध्यानपूर्वक पढ़िए। दिए गए विकल्पों में से कोई एक सर्वाधिक सही विकल्प चुनकर लिखिए।  
**कथन (A) :** गीतों की बात चली तो वहाँ मौजूद पचास-साठ लड़कियों में से किसी को भी लोकगीत याद नहीं थे।  
**कारण (R)** नई पीढ़ी लोक-संस्कृति से विरत थी। (1)  
(क) कथन (A) सही है, कारण (R) गलत हैं।  
(ख) कथन (A) तथा कारण (R) दोनों गलत हैं।  
(ग) कथन (A) गलत है, किंतु कारण (R) सही है।  
(घ) कथन (A) सही है, और कारण (R) उसकी सही व्याख्या है।
3. वर्तमान में मगहर की स्थितियों में क्या बदलाव आ चुका है ? (1)  
(क) ब्याह और मरनी-हरनी में एका नजर नहीं आती।  
(ख) सामाजिकता का लोप सा हो गया है।  
(ग) अब लड़कियों की पढ़ाई और नौकरी पर ध्यान दिया जाता है  
(घ) उपरोक्त सभी
4. लेखक ने पंडरी गाँव की क्या विशेषता बताई ? (2)
5. केसरिया गाँव में मिले एकमात्र संयुक्त परिवार के बारे में लेखक को क्या पता चला ? (2)

#### खंड-ख

- प्रश्न 3 'पदबंध' पर आधारित पाँच प्रश्नों में से **किन्हीं चार** के उत्तर लिखिए — (4x1=4)  
(क) ठीक चार बजकर दस मिनट पर सुभाष बाबू जुलूस लेकर आए। (वाक्य में से क्रिया विशेषण पदबंध चुनकर लिखिए।)  
(ख) पिकनिक मनाते हुए हमने बहुत सी अच्छी-अच्छी बातें सीखी। (रेखांकित पदबंध का भेद लिखिए)  
(ग) क्रिया पदबंध का एक उदाहरण देकर वाक्य में प्रयोग कीजिए।  
(घ) समय का सदुपयोग करने वाले लोग कभी असफल नहीं होते। (वाक्य में विशेषण पदबंध चुनकर लिखिए)  
(ङ) मेरी बहन आकाश में तारे देखने छत पर जा रही है। (रेखांकित पदबंध का भेद लिखिए)
- प्रश्न 4 नीचे लिखे वाक्यों में से **किन्हीं चार** वाक्यों का निर्देशानुसार रचना के आधार पर वाक्य रूपांतरण कीजिए— (4x1=4)  
(क) बच्चा दौड़ कर मेरे पास आया। (वाक्य को संयुक्त वाक्य में बदलिए।)  
(ख) राम आया और चला गया। (वाक्य को सरल वाक्य में बदलिए।)  
(ग) कमाने वाला खाएगा। (वाक्य को मिश्र वाक्य में बदलिए।)  
(घ) जब मजदूरों ने गड़ढा खोद लिया तब वे चले गए। (वाक्य को संयुक्त वाक्य में बदलिए।)  
(ङ) ऐसी सभा पहले नहीं की गई थी, जिसमें खुला चैलेंज दिया गया हो। (सरल वाक्य में बदलिए)
- प्रश्न 5 'समास' पर आधारित पाँच प्रश्नों में से **किन्हीं चार** प्रश्नों के उत्तर दीजिए: (4x1=4)  
(क) 'पीतांबर' सामासिक पद का विग्रह कर्मधारय समास के रूप में कीजिए।  
(ख) द्विगु समास के पूर्व पद की क्या विशेषता होती है ?  
(ग) 'यथाशक्ति' का समास विग्रह करते हुए समास का भेद लिखिए।  
(घ) 'राजपुत्र' में प्रयुक्त समास का नाम लिखिए।  
(ङ) चार गुनी (समस्त पद बनाकर लिखिए।)
- प्रश्न 6 'मुहावरे' पर आधारित पाँच प्रश्नों में से **किन्हीं चार** प्रश्नों के उत्तर दीजिए : (4x1=4)  
(क) भारतीय प्रशासनिक सेवा में चयनित होने के लिए ..... करनी पड़ती है।  
(उपयुक्त मुहावरे द्वारा रिक्त स्थान की पूर्ति कीजिए।)  
(ख) 'अंधे के हाथ बटेर लगना' का अर्थ लिखिए।  
(ग) 'दूध की मक्खी होना' मुहावरे का वाक्य में सार्थक प्रयोग कीजिए।  
(घ) आज के युग में स्वार्थी लोग अपना काम बनाने में लगे रहते हैं। (रेखांकित अंश के लिए उपयुक्त मुहावरा लिखिए।)  
(ङ) छोटे भाई की लापरवाही देखकर बड़े भाई ने उसे .....। (उपयुक्त मुहावरे द्वारा रिक्त स्थान की पूर्ति कीजिए।)

प्रश्न 7 निम्नलिखित गद्यांश को पढ़कर पूछे गए प्रश्नों के सर्वाधिक उपयुक्त विकल्प को चुनकर लिखिए : (5x1=5)

इतिहास में रावण का हाल तो पढ़ा ही होगा। उसके चरित्र से तुमने कौन-सा उपदेश लिया ? या यों ही पढ़ गए ? महज इम्तिहान पास कर लेना कोई चीज़ नहीं, असल चीज़ है बुद्धि का विकास। जो कुछ पढ़ो, उसका अभिप्राय समझो। रावण भूमंडल का स्वामी था। ऐसे राजाओं को चक्रवर्ती कहते हैं। आजकल अंग्रेजों के राज्य का विस्तार बहुत बढ़ा हुआ है, पर इन्हें चक्रवर्ती नहीं कह सकते। संसार में अनेक राष्ट्र अंग्रेजों का आधिपत्य स्वीकार नहीं करते, बिल्कुल स्वाधीन हैं। रावण चक्रवर्ती राजा था, संसार के सभी महीप उसे कर देते थे। बड़े-बड़े देवता उसकी गुलामी करते थे। आग और पानी के देवता भी उसके दास थे, मगर उसका अंत क्या हुआ ? घमंड ने उसका नाम-निशान तक मिटा दिया, कोई उसे एक चुल्लू पानी देने वाला भी न बचा।

- (1) चक्रवर्ती राजा किसे कहते थे ?  
 (क) जो चक्र की तरह वर्तन करते थे (ख) जो सब लोगों पर शासन करते हैं  
 (ग) जो भूमंडल का स्वामी होता है (घ) इनमें से कोई नहीं (1)
- (2) गद्यांश के अनुसार रावण के विनाश का मुख्य कारण क्या था ?  
 (क) राज्य का विस्तार करना (ख) भूमंडल का स्वामी होना  
 (ग) महीप द्वारा कर लेना (घ) अभिमान करना (1)
- (3) गद्यांश में आए 'महीप' शब्द का क्या अर्थ है ?  
 (क) रंक (ख) शक्तिशाली (ग) राजा (घ) महान (1)
- (4) निम्नलिखित कथन (A) तथा कारण (R) को ध्यानपूर्वक पढ़िए और उसके बाद दिए गए विकल्पों में से सर्वाधिक सही विकल्प चुनकर लिखिए।  
 कथन (A) : महज इम्तिहान पास कर लेना बड़ी बात है, बुद्धि का विकास नहीं।  
 कारण (R) जो कुछ पढ़ो, उसका अभिप्राय समझो। (1)  
 (क) कथन (A) तथा कारण (R) दोनों सही हैं।  
 (ख) कथन (A) तथा कारण (R) दोनों गलत हैं।  
 (ग) कथन (A) गलत है तथा कारण (R) सही है।  
 (घ) कथन (A) सही है लेकिन कारण (R) उसकी गलत व्याख्या करता है।
- (5) प्रस्तुत गद्यांश के आधार पर स्पष्ट कीजिए कि मनुष्य को कौन-से कर्म नहीं करने चाहिए ?  
 (क) अभिमान नहीं करना चाहिए (ख) कुकर्म नहीं करना चाहिए  
 (ग) अत्याचार नहीं करना चाहिए (घ) उपर्युक्त सभी (क), (ख), (ग) (1)

प्रश्न 8 गद्य खंड पर आधारित निम्नलिखित प्रश्नों में से किन्हीं तीन प्रश्नों के उत्तर लगभग 25 – 30 शब्दों में लिखिए : (3x2=6)

- (क) 'शिक्षा रटंत विद्या नहीं है' – बड़े भाईसाहब के आधार पर कथन को सिद्ध कीजिए।
- (ख) लोग अपने-अपने मकानों व सार्वजनिक स्थलों पर राष्ट्रीय झंडा फहराकर किस बात का संकेत देना चाहते थे ? पाठ 'डायरी का एक पन्ना' के आधार पर स्पष्ट कीजिए।
- (ग) ततौरा क्यों चर्चित था ?
- (घ) कहानी के अनुसार बड़े भाईसाहब को क्या विशेषाधिकार मिला हुआ था ?

प्रश्न 9 निम्नलिखित काव्यांश को पढ़कर प्रश्नों के सर्वाधिक उपयुक्त विकल्पों का चयन कीजिए – (5x1=5)

विचार लो कि मर्त्य हो न मृत्यु से डरो कभी,  
 मरो, परंतु यों मरो कि याद जो करें सभी।  
 हुई न यों सुमृत्यु तो वृथा मरे, वृथा जिए,  
 मरा नहीं वही कि जो जिया न आपके लिए।  
 वही पशु-प्रवृत्ति है कि आप आप ही चरे,  
 वही मनुष्य है कि जो मनुष्य के लिए मरे॥

- (1) कवि ने किसकी मृत्यु को सुमृत्यु माना है ?  
 (क) परोपकारी मनुष्य की (ख) शिक्षित मनुष्य की (ग) अमीर मनुष्य की (घ) स्वार्थी मनुष्य की
- (2) कवि के अनुसार पशु-प्रवृत्ति क्या होती है ?  
 (क) केवल अपने लिए जीना (ख) देश के लिए जीना  
 (ग) इनमें से कोई नहीं (घ) दूसरों के लिए जीना
- (3) मरा नहीं वही कि जो जिया न आपके लिए पंक्ति का क्या आशय है ?  
 (क) जिसकी इच्छाएँ कभी पूरी नहीं होतीं, वह कभी नहीं मरता।  
 (ख) जो अपने लिए जीता है, वह कभी नहीं मरता।  
 (ग) जो अपना जीवन परोपकार में लगा देता है, वह कभी नहीं मरता।  
 (घ) जो पशुओं की भाँति जीता है वह कभी नहीं मरता।



- (4) निम्नलिखित कथन (A) तथा कारण (R) को ध्यानपूर्वक पढ़िए और उसके बाद दिए गए विकल्पों में से सर्वाधिक सही विकल्प चुनकर लिखिए।

कथन (A) परोपकार करने वाला अमर हो जाता है।

कारण (R) मनुष्य के लिए मनुष्यता का होना अनिवार्य है।

(क) कथन (A) और कारण (R) दोनों सही हैं।

(ख) कथन (A) कारण (R) दोनों गलत हैं।

(ग) कथन (A) गलत है और कारण (R) सही है।

(घ) (क), (ख), (ग) तीनों विकल्प गलत हैं।

- (5) हमारा मरना और जीना कब व्यर्थ है ?

(क) धनी होने पर (ख) सुमृत्यु होने पर

(ग) सुमृत्यु न होने पर (घ) निर्धन होने पर

प्रश्न 10 निम्नलिखित प्रश्नों में से किन्हीं तीन प्रश्नों के उत्तर 25 – 30 शब्दों में दीजिए –

(3x2=6)

- (1) मीराबाई ने श्री कृष्ण के रूप-सौंदर्य का वर्णन कैसे किया है ? उनके पद के आधार पर बताइए।
- (2) बादलों के उठने तथा वर्षा होने का चित्रण अपने शब्दों में लिखिए।
- (3) 'फ़तह का जश्न इस जश्न के बाद है' पंक्ति में किन दो अलग-अलग जश्नों का जिक्र किया गया है ? 'कर चले हम फ़िदा' कविता के आधार पर बताइए।
- (4) प्रत्येक व्यक्ति की विशेषता उसके भीतर निहित होती है। कबीर की साखी के आधार पर उदाहरण देकर स्पष्ट कीजिए।

प्रश्न 11 पूरक पुस्तक 'संचयन' पर आधारित निम्नलिखित प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर लगभग 40-50 शब्दों में लिखिए –

(2x3=6)

- (1) अंत में हरिहर काका द्वारा जमीन के संदर्भ में लिया जाने वाला निर्णय क्या था ? उनके इस निर्णय का उनके परिवार पर क्या असर हुआ ? हरिहर काका की स्थिति आम व्यक्ति को क्या संदेश देती है ?
- (2) 'सपनों के से दिन' पाठ के आधार पर लिखिए कि लेखक को नयी श्रेणी में जाने की प्रसन्नता अन्य विद्यार्थियों की तरह क्यों नहीं होती थी ?
- (3) 'आज की शिक्षा-व्यवस्था में विद्यार्थियों को अनुशासित बनाए रखने के लिए क्या तरीके निर्धारित हैं ? पाठ में अपनाई गई विधियाँ आज के संदर्भ में कहाँ तक उचित लगती हैं ? जीवन-मूल्यों के आलोक में अपने विचार प्रस्तुत कीजिए।

#### खंड-घ

प्रश्न 12 निम्नलिखित में से किन्हीं एक विषय पर दिए गए संकेत-बिंदुओं के आधार पर लगभग 120 शब्दों में एक अनुच्छेद लिखिए –

(1x5=5)

- |   |  |  |
|---|--|--|
| <p>(1) जैविक (ऑर्गेनिक) खेती : एक कदम प्रकृति की ओर</p> <ul style="list-style-type: none"> <li>• समय की माँग</li> <li>• सकारात्मक प्रभाव</li> <li>• कठिनाइयाँ, सुझाव</li> </ul> | <p>(2) स्वच्छता में आम आदमी की भूमिका</p> <ul style="list-style-type: none"> <li>• स्वच्छता क्यों आवश्यक</li> <li>• स्वच्छता का स्वास्थ्य पर प्रभाव</li> <li>• हमारी भूमिका</li> </ul> | <p>(3) मेरे सपनों का भारत</p> <ul style="list-style-type: none"> <li>• कैसा है ?</li> <li>• क्या अपेक्षा है ?</li> <li>• आपका कर्तव्य</li> </ul> |
|---|--|--|

प्रश्न 13. निम्नलिखित में से किसी एक विषय पर लगभग 100 शब्दों में पत्र लिखिए –

(1x5=5)

अकसर हम सड़क दुर्घटनाओं के विषय में सुनते हैं, जिनका कारण खराब सड़कें भी हैं। सड़कों की दुर्दशा का वर्णन करते हुए किसी हिंदी समाचार-पत्र के संपादक को पत्र लिखिए।

#### अथवा

आप विद्यालय के खेल सचिव हैं। आप नवीं-दसवीं कक्षा के बीच फुटबॉल मैच आयोजित करवाना चाहते हैं, अतः उसकी अनुमति के लिए प्रधानाचार्य को पत्र लिखिए।

प्रश्न: 14 आप दसवीं कक्षा के अर्पित/अर्पिता हैं। भोजनावकाश के दौरान खेल के मैदान में आपका ब्लेजर (कोट) कहीं छूट गया। उससे संबंधित जानकारी देते हुए लगभग 60 शब्दों में एक सूचना तैयार कीजिए। (1x4=4)

#### अथवा

आप तरुणा अरोड़ा/तरुण अरोड़ा हैं और बहुमुखी विकास विद्यालय की प्राचार्या/प्राचार्य हैं। आपके विद्यालय में आगामी सत्र से रोबोटिक्स की कक्षा प्रारंभ होने वाली है। छात्रों को इसकी जानकारी देते हुए लगभग 60 शब्दों में एक सूचना तैयार कीजिए।

प्रश्न 15 एक प्रसिद्ध मोबाइल फोन कंपनी की ओर से लगभग 25-30 शब्दों में विज्ञापन लेखन कीजिए। (1x5=5)

#### अथवा

आपके पिताजी अपना दो कमरों वाला घर किराए पर देना चाहते हैं। घर और उससे संबंधित जानकारी देते हुए लगभग 30 शब्दों में एक आकर्षक विज्ञापन तैयार कीजिए।

प्रश्न 16 अपने प्रधानाचार्य abcschool@gmail.com को लगभग 80 शब्दों में ईमेल लिखिए जिसमें आपके विद्यालय के क्रीड़ा परिसर में अन्य विद्यालय के साथ क्रिकेट मैच खेलने की अनुमति माँगी गई हो। (1x5=5)

#### अथवा

'सुबह-सुबह अचानक घर की घंटी बजी, दरवाजा खोलते ही मैं चौंक गया/गयी .....' पंक्ति से प्रारंभ करते हुए लगभग 100 शब्दों में लघुकथा लिखिए।





- (1) अस्मिन् प्रश्नपत्रे चत्वारः भागाः सन्ति।  
 'क' भागः - अपठितावबोधनम् - 10 अङ्काः 'ख' भागः - रचनात्मककार्यम् - 15 अङ्काः  
 'ग' भागः - अनुप्रयुक्तव्याकरणम् - 25 अङ्काः 'घ' भागः - पठितावबोधनम् - 30 अङ्काः
- (2) कृपया सम्यक् परीक्षणं कुर्वन्तु यत् अस्मिन् प्रश्नपत्रे 18 प्रश्नाः सन्ति।  
 (3) उत्तरलेखनात् पूर्वं प्रश्नक्रमाङ्कः अवश्यं लेखनीयः।  
 (4) सर्वेषां प्रश्नानाम् उत्तराणि संस्कृतेन लेखनीयानि।  
 (5) प्रश्नानां निर्देशाः ध्यानेन अवश्यं पठनीयाः।

**'क' भागः अपठितावबोधनम्****10 अङ्काः****1. अधोलिखितम् अनुच्छेदं पठित्वा प्रदत्तप्रश्नानाम् उत्तराणि लिखत -**

स्वामिविवेकानन्दस्य जन्म विद्वज्जनानुसारं मकरसङ्क्रान्तौ कोलकातायाम् अभवत्। तेषां शैशवस्य नाम नरेन्द्रनाथदत्तः आसीत्। नरेन्द्रनाथस्य पिता विश्वनाथदत्तः माता च भुवनेश्वरीदेवी धार्मिकस्वभाविनी आसीत्। तस्याः अधिकः कालः शिवस्य पूजने व्यतीतः भवति स्म। स्वामिविवेकानन्दस्य गुरुः रामकृष्णपरमहंसः आसीत्। संन्यासदीक्षानन्तरं नरेन्द्रस्य नाम विवेकानन्दः इति अभवत्। सः भारतभ्रमणं योगसाधनां च कृत्वा 1893 तमे वर्षे अमेरिकादेशे विश्वधर्मसभायां भारतस्य गौरवं प्रतिष्ठापितवान्। सभास्थले विविधाः धर्मग्रन्थाः एकस्य उपरि एकः क्रमेण स्थापिताः आसन्। संयोगवशात् "गीता" सर्वेषां अधः आसीत्। एकः अमेरिकावासी उपहासपूर्वकम् अवदत् - स्वामिन्! भवतां गीता धर्मग्रन्थानाम् अधः वर्तते इति। प्रत्युत्पन्नमतिः विवेकानन्दः हसन् एव अवदत् - 'आम्! सत्यम्। आधारशिला तु अधः एव भवति। सा यदि बहिः स्वीक्रियेत तर्हि समग्रम् अधः पतिष्यति।' स्वामिविवेकानन्दस्य जन्मदिवसं भारतीयाः राष्ट्रिययुवादिवसस्य रूपे मानयन्ति।

**(I) एकपदेन उत्तरत - (केवलं प्रश्नद्वयम्)****(1x2=2)**

- (i) विद्वज्जनानुसारं विवेकानन्दस्य जन्म कदा अभवत् ?  
 (ii) विवेकानन्दस्य गुरुः कः आसीत् ?  
 (iii) माता भुवनेश्वरीदेवी कीदृशी आसीत् ?

**(II) पूर्णवाक्येन उत्तरत - (केवलं प्रश्नद्वयम्)****(2x2=4)**

- (i) अमेरिकावासी उपहासपूर्वकं किम् अवदत् ?  
 (ii) प्रत्युत्पन्नमतिः विवेकानन्दः हसन् किं प्रत्यवदत् ?  
 (iii) नरेन्द्रस्य पितुः किं नाम आसीत् ?

**(III) अनुच्छेदस्य कृते समुचितं शीर्षकं लिखत -****(1x1=1)****(IV) भाषिककार्यम् - (केवलं प्रश्नत्रयम्)****(1x3=3)**

- (i) "विविधाः धर्मग्रन्थाः" अत्र विशेष्यपदं किम् ?  
 (ii) 'उपरि' इति पदस्य किं विलोमपदम् अनुच्छेदे आगतम् ?  
 (क) अधः (ख) कालः (ग) बहिः (घ) एव  
 (iii) 'भवति' क्रियापदस्य कर्तृपदं किम् अस्ति ?  
 (क) आधारशिला (ख) एव (ग) अधः (घ) गुरुः  
 (iv) 'जननी' इति पदस्य किं पर्यायपदम् अनुच्छेदे आगतम् ?  
 (क) पिता (ख) माता (ग) नेता (घ) भगिनी

**'ख' भागः रचनात्मककार्यम्****15 अङ्काः****2. भवत्याः नाम दिव्या। भवत्याः विद्यालयस्य छात्राः स्वतन्त्रतादिवससमारोहे भागं गृहीतवन्तः। तं विषयं वर्णयन्ती भगिनीम् अपूर्वां प्रति लिखिते पत्रे मञ्जूषातः पदानि चित्वा सम्पूर्णं पत्रं पुनः लिखतु - (½ x10=5)**

आदरणीये भगिनि!

भिलाईतः

सादरं (i) \_\_\_\_\_

तिथिः \_\_\_\_\_

अत्र (ii) \_\_\_\_\_ तत्रास्तु। इदं (iii) \_\_\_\_\_ भवती अतीव प्रसन्ना भविष्यति। यत् स्वतन्त्रतादिवससमारोहे अस्माकं

(iv) \_\_\_\_\_ सप्तम्याः कक्षायाः छात्राः भागं गृहीतवन्तः। तैः यः सांस्कृतिककार्यक्रमः प्रस्तुतः सः अतीव मनमोहकः

(v) \_\_\_\_\_। कार्यक्रमस्य (vi) \_\_\_\_\_ प्रदेशस्य गृहराज्यमन्त्री आसीत्। तेन एव पथसञ्चलनस्य (vii) \_\_\_\_\_

कृतम्। (viii) \_\_\_\_\_ दृष्ट्वा दर्शकाः करतलध्वनिना तेषां (ix) \_\_\_\_\_ अकुर्वन्। अन्ते सर्वे छात्राः मोदकानि प्राप्य

प्रसन्नाः भूत्वा स्व-स्वगृहं गतवन्तः।

भवदीया अनुजा

मञ्जूषापदानि-

मुख्यातिथिः,	कार्यक्रमः,	कुशलं,	उत्साहवर्धनम्,	दिव्या,
विद्यालयस्य,	प्रणामाः,	ज्ञात्वा,	निरीक्षणं,	आसीत्

(x) \_\_\_\_\_

3. प्रदत्तं चित्रं दृष्ट्वा मञ्जूषायां प्रदत्तशब्दानां सहायतया पञ्चवाक्यानि संस्कृतेन लिखत -

(1x5=5)

उद्यानम् , बालकाः , बालिके , वृक्षः , खगाः , पुष्पाणि , सूर्यः , प्रसन्नाः , विकसन्ति ,  
क्रीडन्ति , भ्रमतः , जनौ , कन्दुकम् , भ्रमणम् , पर्वताः , वातावरणम् , सन्ति



अथवा

‘वृक्षाणां महत्त्वम्’ इति विषयम् अधिकृत्य मञ्जूषापदानां सहायतया पञ्चवाक्येषु एकं अनुच्छेदं संस्कृतेन लिखत -

प्रकृतेः , शोभा , पर्यावरणस्य रक्षकाः , यच्छन्ति , प्राणवायुम् , औषधम् , काष्ठम् ,  
फलानि , पुष्पाणि , मेघवर्षणे , सहायकाः , खगानाम् , आश्रयस्थलम्

4. अधोलिखितां कथां मञ्जूषायाः सहायतया पूरयित्वा पुनः लिखत -

(½ x10=5)

एकस्मिन् (i) \_\_\_\_\_ एकः काकः अवसत्। एकदा सः (ii) \_\_\_\_\_ व्याकुलः अभवत्। सः जलम् अन्वेष्टुम् (iii) \_\_\_\_\_  
अभ्रमत्। एकस्मिन् स्थाने सः एकं (iv) \_\_\_\_\_ अपश्यत्। तस्मिन् घटे (v) \_\_\_\_\_ जलम् आसीत्। अतः सः जलं  
पातुं सफलः न अभवत्। तदा सः एकम् (vi) \_\_\_\_\_ अचिन्तयत्। सः कुतश्चित् (vii) \_\_\_\_\_ आनयत् तान् च  
पाषाणखण्डान् एकैकं तस्मिन् घटे (viii) \_\_\_\_\_। एवं घटे जलं शनैः शनैः उपरि आगच्छत्। तदनन्तरं सः काकः  
जलं पीत्वा (ix) \_\_\_\_\_ अभवत्। उद्यमेन कौशलेन च सः काकः जलं पीत्वा सफलः अभवत्। अतएव उक्तम् - उद्यमेन  
हि सिध्यन्ति कार्याणि न (x) \_\_\_\_\_।

घटं , इतस्ततः , वने , अल्पम् , पिपासया , उपायं , पाषाणखण्डान् , अक्षिपत् , मनोरथैः , प्रसन्नः

अथवा

रिक्तस्थानानि पूरयित्वा अधोलिखितं संवादं पुनः लिखत -

(1x5=5)

सुधाकरः - नमस्ते आगच्छतु भवान्। (i) .....  
अतिथिः - उपविशामि तावत्। भवतः पितृमहोदयाः गृहे न सन्ति किम् ?  
सुधाकरः - सः तु इदानीम् एव (ii) .....  
अतिथिः - किमर्थं सः चिकित्सालयं गतः ?  
सुधाकरः - नास्ति विशेषं कारणम्। सः प्रतिदिनं (iii) ..... तत्र गच्छति।  
अतिथिः - एवम् अस्ति किम्, प्रतिदिनम् एव ?  
सुधाकरः - आम् यदा कदा दुग्धं औषधं च अपि नयति।  
अतिथिः - सः तु परोपकारं करोति।  
सुधाकरः - किम् अत्र परोपकारः। (iv) .....  
अतिथिः - धन्योऽहं यत् एतेषाम् अद्य (v) \_\_\_\_\_।

मञ्जूषा -	(i)	एतत् तु अस्माकं कर्तव्यम् एव
	(ii)	उपविशतु
	(iii)	दर्शनं भविष्यति
	(iv)	चिकित्सालयं गतः
	(v)	रुग्णेभ्यः फलं दातुं

‘ग’ भागः अनुप्रयुक्तव्याकरणम्

25 अङ्काः

5. अधोलिखितवाक्येषु रेखाङ्कितपदेषु सन्धिं सन्धिविच्छेदं वा कुरुत - (केवलं प्रश्नचतुष्टयम्) -

(1x4=4)

- राज्ञः स्वेषु गात्रेष्वपि निरासक्तिं विज्ञाय ब्रह्माण्डं व्याकुलं सञ्जातम्।
- अदीयमानं धनं निधन + एकनिष्ठम् भवति।
- षट् + एते पाठका गुणाः सन्ति।
- मयूरः पक्षौ + अवधूय वदति
- कामात् क्रोधोऽभिजायते।

6. अधोलिखितवाक्येषु रेखाङ्कितपदानां समासं विग्रहं वा प्रदत्तविकल्पेभ्यः चित्वा लिखत – (केवलं प्रश्नचतुष्टयम्) – (1x4=4)
- (i) अहो! न ज्ञानं भवत्याः ?  
(क) नज्ञानं (ख) सज्ञानं (ग) अज्ञानं (घ) अभिज्ञानं
- (ii) देवाधिपतिः शक्रः राजानं चक्षुः अयाचत् ।  
(क) देवानाम् अधिपतिः (ख) दैवानां पतिः (ग) देवेषु पतिः (घ) देवानाम् अधिपतीनाम्
- (iii) मेषः अश्वशालां प्राविशत् ।  
(क) अश्वात् शालाम् (ख) अश्वेभ्यः शालाम् (ग) अश्वे शालाम् (घ) अश्वेन शालान्
- (iv) युधिष्ठिरार्जुनौ रथारोहणं नाटयतः ।  
(क) युधिष्ठिरः च अर्जुनः च (ख) युधिष्ठिरः अर्जुनौ च  
(ग) युधिष्ठिरौ च अर्जुनः (घ) युधिष्ठिरौ च अर्जुनौ च
- (v) सर्वेषां महत्त्वं विद्यते यथासमयम् ।  
(क) समयम् यथा (ख) समयस्य अतिक्रमण (ग) समयम् अनतिक्रम्य (घ) अति समयः
7. अधोलिखितवाक्येषु रेखाङ्कितपदानां प्रकृति-प्रत्ययौ संयोज्य विभज्य वा उचितम् उत्तरं विकल्पेभ्यः चित्वा लिखत – (केवलं प्रश्नचतुष्टयम्) – (1x4=4)
- (i) शारदा अम्भोज-वदना वर्तते ।  
(क) वदना + टाप् (ख) वद + ना (ग) वदन + टाप् (घ) वादन + टाप्
- (ii) राजहंसः राजहंसी च विहरतः ।  
(क) राज + हंसी (ख) राजहंस + डीप् (ग) राजहंस + डीप् (घ) राजहंस + डीन्
- (iii) भारति! तव कोशः अपूर्वः ।  
(क) भारत + डीप् (ख) भारत + ई (ग) भारत + टाप् (घ) भारत + इ
- (iv) त्वं दिन + ठक् कार्यं कुरु ।  
(क) दैनिकम् (ख) दैनिकम् (ग) दैनिकः (घ) दैनिकी
- (v) एषा सृष्टिः रमणीय + टाप् ।  
(क) रमणीया (ख) रामणीया (ग) रमणीयः (घ) रमणी
8. वाच्यानुसारं उचितपदैः रिक्तस्थानानि पूरयित्वा अधोलिखितं संवादं पुनः लिखत – (केवलं प्रश्नत्रयम्) (1x3=3)
- सुरेशः – मित्र! त्वम् कुत्र ..... ?  
उमेशः – मित्र! ..... तु पुस्तकालयः गम्यते ।  
सुरेशः – तिष्ठ तावत्! ..... अपि चलायामि ।  
उमेशः – आगच्छ । आवाभ्यां तत्र ..... पठ्यते ।
- मञ्जूषा
- |     |        |         |      |
|-----|--------|---------|------|
| मया | गच्छसि | पुस्तकं | अहम् |
|-----|--------|---------|------|
9. कालबोधकशब्दैः अधोलिखित-दिनचर्या पूरयत – (केवलं प्रश्नत्रयम्) (1x3=3)
- (i) शौर्यः प्रातः 5:00 ..... वादने उत्तिष्ठति ।  
(ii) ततः सः 5:15 ..... वादने योगाभ्यासं करोति ।  
(iii) तदनन्तरं सः 6:45 ..... वादने विद्यालयं गच्छति ।  
(iv) 1:30 ..... वादने आगत्य भोजनं करोति ।
10. मञ्जूषायां प्रदत्तैः उचितैः अव्ययपदैः अधोलिखितवाक्येषु रिक्तस्थानानि पूरयत – (केवलं प्रश्नचतुष्टयम्) (1x4=4)
- (i) ..... बोधिसत्त्वः राजा अभवत् ।  
(ii) अश्वाः प्राणत्राणाय ..... अधावन् ।  
(iii) रामः ..... असत्यं न वदति ।  
(iv) ग्रामात् ..... नदी वहति ।  
(v) कच्छपः सदा ..... चलति ।
- मञ्जूषा –
- |      |      |      |       |         |
|------|------|------|-------|---------|
| शनैः | बहिः | पुरा | कदापि | इतस्ततः |
|------|------|------|-------|---------|
11. अधोलिखितवाक्येषु रेखाङ्कित-अशुद्धपदाय उचितपदं चित्वा वाक्यानि पुनः लिखत – (केवलं प्रश्नत्रयम्) (1x3=3)
- (i) पिता पुत्राय बाल्ये विद्याधनं यच्छसि ।  
(क) यच्छति (ख) यच्छताम् (ग) यच्छामि (घ) यच्छन्ति
- (ii) सः तु वनं गच्छामि । (क) त्वम् (ख) अहं (ग) तौ (घ) वयम्
- (iii) अहं श्वः रायपुरम् अगच्छम् । (क) गच्छामः (ख) गमिष्यामि (ग) गमिष्यसि (घ) गच्छावः
- (iv) ताः फलानि सुन्दराणि सन्ति । (क) तौ (ख) सः (ग) तानि (घ) आवाम्



12. अधोलिखितं गद्यांशं पठित्वा प्रदत्तप्रश्नानाम् उत्तराणि संस्कृतेन लिखत –

(5)

नाहं स्वर्गं न मोक्षं वा कामये किन्तु आर्तानां परित्राणाय एव मे निश्चयः। अस्य याच्ना वृथा मा अस्तु। इत्युक्त्वा स राजा वैद्योक्तविधिना नीलोत्पलम् इव एकं चक्षुः शनैः अक्षतम् उत्पाद्य प्रीत्या याचकाय समर्पितवान्। सः अपि तत् नेत्रं यथास्थानम् अस्थापयत्। ततो महीपालः द्वितीयं नेत्रमपि शनैः निष्कास्य तस्मै ददौ। अथ विस्मितः शक्रः अचिन्तयत् – अहो धृतिः! अहो सत्त्वम्! अहो सत्त्वहितैषिता!

(I) एकपदेन उत्तरत – (केवलं प्रश्नद्वयम्)

(½x2=1)

- (i) कः स्वर्गं मोक्षं वा न इच्छति ?
- (ii) राजा किं यथास्थानम् अस्थापयत् ?
- (iii) स राजा याचकाय किं समर्पितवान् ?

(II) पूर्णवाक्येन उत्तरत – (केवलं प्रश्नद्वयम्)

(1x2=2)

- (i) राजा नेत्रं कथं याचकाय समर्पितवान् ?
- (ii) विस्मितः इन्द्रः किम् अचिन्तयत् ?
- (iii) ‘नाहं स्वर्गं न मोक्षं वा कामये’ इति कः वदति ?

(III) निर्देशानुसारम् उत्तरत – (केवलं प्रश्नद्वयम्)

(1x2=2)

- (i) अस्मिन् अनुच्छेदे ‘नेत्रम्’ इति पदस्य पर्यायः कः लिखितः ?
- (ii) ‘अचिन्तयत्’ इति क्रियापदस्य कर्तृपदम् अनुच्छेदे किम् ?
- (iii) ‘द्वितीयम्’ इति पदस्य विशेष्यपदम् अनुच्छेदे किम् ?

13. अधोलिखितं पद्यांशं पठित्वा प्रदत्तप्रश्नानाम् उत्तराणि संस्कृतेन लिखत –

(5)

य इच्छत्यात्मनः श्रेयः प्रभूतानि सुखानि च  
न कुर्यादहितं कर्म स परेभ्यः कदापि च॥

(I) एकपदेन उत्तरत – (केवलं प्रश्नद्वयम्)

(½x2=1)

- (i) नरः आत्मनः किम् इच्छति ?
- (ii) नरः केभ्यः अहितं कर्म न कुर्यात् ?
- (iii) नरः कीदृशं कर्म न कुर्यात् ?

(II) पूर्णवाक्येन उत्तरत – (केवलं प्रश्नद्वयम्)

(1x2=2)

- (i) जीवने मनुष्यः किं किं इच्छति ?
- (ii) नरः कियन्ति सुखानि इच्छति ?
- (iii) नरः प्रभूतानि कानि इच्छति ?

(III) निर्देशानुसारम् उत्तरत – (केवलं प्रश्नद्वयम्)

(1x2=2)

- (i) ‘अहितं कर्म’ इति अनयोः पदयोः विशेषणपदं किम् ?
- (ii) ‘कुर्यात्’ इति क्रियापदस्य किं कर्तृपदं श्लोके आगतम् ?
- (iii) ‘दुःखानि’ इति पदस्य किं विलोमपदं श्लोके आगतम् ?

14. अधोलिखितं नाट्यांशं पठित्वा प्रदत्तप्रश्नानाम् उत्तराणि संस्कृतेन लिखत –

(5)

काकः – (प्रविश्य, सक्रोधम्) आः किम् उक्तवती भवती ? यदि अहं कृष्णवर्णः तर्हि श्रीरामस्य वर्णः कीदृशः ?  
श्रीवासुदेवस्य वर्णः कीदृशः ? मुग्धे! अहं तु अतीव कर्तव्यपरायणः। प्रभाते ‘का-का’ ध्वनिना सुप्तान् प्रबोधयामि  
कर्मसु च विनियोजयामि।

राजहंसः – हूँ! किमनेन ? एतत् कार्यं तु कुक्कुटोऽपि करोति।

काकः – (विहस्य) कुक्कुटः! अरे अद्य कुतः कुक्कुटाः नगरेषु। अहमेव सर्वत्र सुलभः।

राजहंसः – भोः भोः वाचाल! स्वीयैः कटुभिः क्वणितैः जनजागरणात् अन्यत् तु किमपि न करोषि।

(I) एकपदेन उत्तरत – (केवलं प्रश्नद्वयम्)

(½x2=1)

- (i) काकस्य वर्णः कीदृशः ?
- (ii) अद्य कुक्कुटाः कुत्र न दृश्यन्ते ?
- (iii) कः कर्तव्यपरायणः ?

(II) पूर्णवाक्येन उत्तरत – (केवलं प्रश्नद्वयम्)

(1x2=2)

- (i) काकः कथम् सुप्तान् जनान् प्रभाते प्रबोधयति ?
- (ii) कः सर्वत्र सुलभः वर्तते ?
- (iii) वाचालः कः अस्ति ?

(III) निर्देशानुसारम् उत्तरत – (केवलं प्रश्नद्वयम्)

(1x2=2)

- (i) 'करोति' इति क्रियापदस्य कर्तृपदं नाटयांशे किम् प्रयुक्तम् ?  
(ii) संवादे 'दुर्लभः' पदस्य कः विपर्ययः ?  
(iii) 'कटुभिः क्वणितैः' अनयोः विशेषणपदं किम् ?

15. रेखाङ्कितपदानि आधृत्य प्रश्ननिर्माणं कुरुत – (केवलं पञ्चप्रश्नाः)

(1x5=5)

- (i) शारदा अस्माकं सन्निधिं कुर्यात् ।  
(ii) बोधिसत्त्वः शैशवात् विनयशीलः आसीत् ।  
(iii) राजा याचकेभ्यः दानं ददाति ।  
(iv) नेपथ्ये काकध्वनिः श्रूयते ।  
(v) मयूरस्य नृत्यं प्रकृतेः आराधना अस्ति ।  
(vi) सूर्योदये तमः नश्यति ।

16. मञ्जूषातः समुचितपदानि चित्वा अधोलिखित-श्लोकस्य अन्वयं पूरयित्वा पुनः लिखत –

(½x4=2)

अनुद्वेगकरं वाक्यं सत्यं प्रियहितं च यत् ।  
स्वाध्यायाभ्यसनं चैव वाङ्मयं तप उच्यते ॥

अन्वयः – (i) \_\_\_\_\_ वाक्यम् अनुद्वेगकरं (ii) \_\_\_\_\_ प्रियहितं च (तथा) स्वाध्याय-अभ्यसनं  
(iii) \_\_\_\_\_ वाङ्मयं (iv) \_\_\_\_\_ उच्यते ॥

मञ्जूषा –

चैव	सत्यं	यत्	तपः
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अथवा

मञ्जूषायाः साहाय्येन श्लोकस्य भावार्थं रिक्तस्थानानि पूरयित्वा पुनः लिखत –

(½x4=2)

शक्नोतीहैव यः सोढुं प्राक् शरीरविमोक्षणात् ।  
कामक्रोधोद्वेगं वेगं सः युक्तः स सुखी नरः ॥

भावार्थः – यः मनुष्यः शरीरस्य (i) \_\_\_\_\_ प्राक् कामात् क्रोधात् च उत्पन्नं (ii) \_\_\_\_\_  
अत्रैव सोढुम् समर्थः (iii) \_\_\_\_\_ सः जनः योगी अस्ति सः च (iv) \_\_\_\_\_ नरः अस्ति ।

मञ्जूषा –

अस्ति	विमोक्षणात्	वेगं	सुखी
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17. अधोलिखितवाक्येषु रेखाङ्कितपदानां प्रसङ्गानुकूलम् उचितार्थं चित्वा लिखत – (केवलं प्रश्नचतुष्टयम्) (1x4=4)

- (i) अलम् अलं मिथः कलहेन ।  
(क) मिथ्या (ख) परस्परम् (ग) मिथुनः (घ) मयूरः  
(ii) विधात्रा एव अहं पक्षिराजः कृतः ।  
(क) जिज्ञासा (ख) कर्मणा (ग) प्रेम्णा (घ) ब्रह्मणा  
(iii) त्वम् आदौ इन्द्रियाणि नियम्य कामं जहि ।  
(क) अन्ते (ख) समाप्ते (ग) प्रारम्भे (घ) अर्जुनः  
(iv) पुंसः विषयेषु सङ्गः जायते ।  
(क) आसक्तिः (ख) विनम्रता (ग) पवित्रम् (घ) अपवित्रम्  
(v) मेध्यम् अमेध्यं सर्वमेव भक्षयति ।  
(क) शुद्धम् (ख) अशुद्धम् (ग) अदभुतम् (घ) चकितम्

18. अधोलिखितां कथां मञ्जूषापद-सहायतया पूरयित्वा लिखत –

(½x8=4)

बोधिसत्त्वः (i) \_\_\_\_\_ राजा आसीत् । सः वृद्धोपसेवी (ii) \_\_\_\_\_ च आसीत् । असौ पुत्रवत् (iii) \_\_\_\_\_ पालयति स्म । तेन नगरस्य समन्ततः अनेकाः धनधान्यसमृद्धाः (iv) \_\_\_\_\_ निर्मिताः । तस्य दानशीलताम् (v) \_\_\_\_\_ देशविदेशेभ्यः जनाः आगच्छन्ति स्म । एकदा देवराजः इन्द्रः तस्य दानशीलताम् (vi) \_\_\_\_\_ तस्य समीपम् आगत्य अवदत् – हे राजन् ! अहं नेत्रहीनः याचकः (vii) \_\_\_\_\_ किमपि प्राप्तुम् इच्छामि । यदि भवान् प्रसन्नः तदा एकस्य चक्षुषः मह्यं दानं करोतु । राजा तस्मै (viii) \_\_\_\_\_ एव अगच्छत् ।

मञ्जूषा –

चक्षुर्द्वयम् ,	शिवीनाम् ,	प्रजाः ,	विनयशीलः ,
परीक्षितुम् ,	आकर्ष्य ,	त्वतः ,	दानशालाः

X

- ① V.P
- ② So. Sci
- ③ Sci
- ④ AI
- ⑤ Eng
- ⑥ Maths
- ⑦ Hindi
- ⑧ Sans
- ⑨





Date : 17.09.2024

MIDTERM EXAMINATION 2024

Time : 3 Hrs.

Class : X

SUBJECT : MATHEMATICS (SET – A)

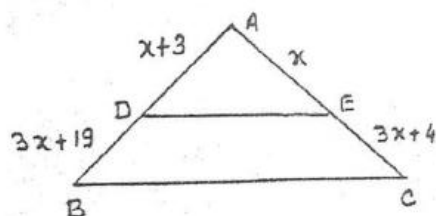
M.M. : 80

**General Instructions :**

- The question paper contains five sections A, B, C, D and E. Each section is compulsory. However, there are internal choices in some questions.
- **Section A** has MCQs and 2 Assertion – Reason based questions of 1 mark each.
- **Section B** has 5 very short answer type questions of 2 marks each.
- **Section C** has 6 short answer type questions of 3 marks each.
- **Section D** has 4 long answer type questions of 5 marks each.
- **Section E** has 3 case based integrated units of assessment (4 marks each) with sub-parts of the values of 1, 1 and 2 marks each respectively.
- All questions are compulsory. However, an internal choice in 2 questions of 5 marks, 2 questions of 3 marks and 2 questions of 2 marks has been provided. An internal choice has been provided in the 2 marks questions of Section – E.
- Draw neat figures wherever required.  $Take = \frac{22}{7}$ , whenever required if not stated.

**Section – A****(This section comprises of Multiple Choice Questions (MCQS) of 1 mark each)**

01. If  $p$  and  $q$  are two distinct prime numbers, then LCM ( $p, q$ ) is  
 (A) 1 (B)  $p$  (C)  $q$  (D)  $pq$  (1)
02. If  $LCM(x, 18) = 36$  and  $HCF(x, 18) = 2$  then  $x$  is  
 (A) 2 (B) 3 (C) 4 (D) 5 (1)
03.  $\sqrt{5} + \sqrt{3} + 2$  is  
 (A) a natural number (B) an integer (C) a rational number (D) an irrational number (1)
04. The decimal expansion of  $17/8$  will terminate after how many places of decimals?  
 (A) 1 (B) 2 (C) 3 (D) will not terminate (1)
05. If the system of equations  $2x + 3y = 5$ ,  $4x + ky = 10$  has infinitely many solutions, then  $k =$   
 (A) 1 (B)  $\frac{1}{2}$  (C) 3 (D) 6 (1)
06. If a pair of equations is consistent, then the lines representing them are  
 (A) parallel (B) always coincident (C) intersecting or coincident (D) always intersecting (1)
07. If the sum of ages of father and his son in years is 65 and twice the difference of their ages in years is 50, then the age of father is  
 (A) 40 years (B) 45 years (C) 55 years (D) 65 years (1)
08. If  $\alpha, \beta$  are the zeros of the polynomial  $f(x) = x^2 + x + 1$ , then  $1/\alpha + 1/\beta =$   
 (A) 1 (B) -1 (C) 0 (D) none of these (1)
09. In figure the value of  $x$  for which  $DE \parallel BC$  is



- (A) 4 (B) 1 (C) 3 (D) 2 (1)
10. The distance of the point  $p(2, 3)$  from the  $x$ -axis is  
 (A) 2 (B) 3 (C) 1 (D) 5 (1)
11. If  $x \tan 45^\circ \cos 60^\circ = \sin 60^\circ \cot 60^\circ$ , then  $x$  is equal to  
 (A) 1 (B)  $\sqrt{3}$  (C)  $\frac{1}{2}$  (D)  $\frac{1}{\sqrt{2}}$  (1)
12.  $\frac{2 \tan 30^\circ}{1 + \tan^2 30^\circ}$  is equal to  
 (A)  $\sin 60^\circ$  (B)  $\cos 60^\circ$  (C)  $\tan 60^\circ$  (D)  $\sin 30^\circ$  (1)
13. If  $\tan x = 3 \cot x$  then  $x = ?$   
 (A)  $60^\circ$  (B)  $45^\circ$  (C)  $30^\circ$  (D)  $15^\circ$  (1)

:: 2 ::

14.  $\sin 2A = 2\sin A$  is true when  $A =$   
 (A)  $0^\circ$  (B)  $30^\circ$  (C)  $45^\circ$  (D)  $60^\circ$  (1)
15. If the area of a sector of a circle is  $\frac{7}{20}$  of the area of the circle, then the sector angle is equal to  
 (A)  $110^\circ$  (B)  $130^\circ$  (C)  $100^\circ$  (D)  $126^\circ$  (1)
16. A die is thrown once. The probability of getting an odd number is  
 (A)  $\frac{2}{3}$  (B)  $\frac{1}{3}$  (C)  $\frac{1}{2}$  (D)  $\frac{1}{6}$  (1)
17. The probability of selecting a consonant from the letters of the word 'TRIANGLE' is  
 (A)  $\frac{2}{7}$  (B)  $\frac{3}{8}$  (C)  $\frac{5}{8}$  (D)  $\frac{1}{8}$  (1)
18. A number is selected from the numbers 1 to 20. The probability that it is prime is  
 (A)  $\frac{2}{5}$  (B)  $\frac{1}{6}$  (C)  $\frac{9}{25}$  (D)  $\frac{5}{6}$  (1)

In Assertion (A) – Reason (R) questions, you have to choose correct option amongst the following options  
 (A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).  
 (B) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A).  
 (C) Assertion (A) is true but Reason (R) is false.  
 (D) Assertion (A) is false but Reason (R) is true.

19. **Statement – 1 (Assertion) :** If the probability of occurrence of an even is 0.7, then the probability of its non-occurrence is 0.3.

**Statement – 2 (Reason) :** For any event A,  $P(A) + P(\text{not } A) = 1$ .

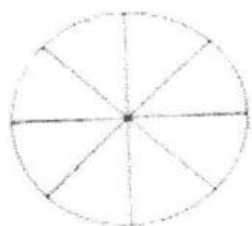
20. **Statement – 1 (Assertion) :** If  $\sin \theta + \sin^2 \theta = 1$  then  $\cos^2 \theta + \cos^4 \theta = 1$ .  
**Statement – 2 (Reason) :**  $1 - \sin^2 \theta = \cos^2 \theta$  (1)

#### Section – B

21. The HCF of two numbers is 18 and their product is 12960. Find their LCM. (2)
22. If  $-4$  is a zero of the polynomial  $x^2 - x - (2k + 2)$  then find the value of  $k$ . (2)
- OR**
- If the sum of the zeros of the quadratic polynomial  $kx^2 - 3x + 5$  is 1, write the value of  $k$ .
23. Diagonals AC and BD of a trapezium ABCD with  $AB \parallel DC$  intersect each other at the point O. Show that  $\frac{OA}{OC} = \frac{OB}{OD}$  (2)
24. In a right triangle ABC, right-angled at B, if  $\tan A = 1$  then verify that  $2\sin A \cos A = 1$  (2)
- OR**
- If  $\tan A = 1$  and  $\tan B = \sqrt{3}$ , evaluate  $\cos A \cos B - \sin A \sin B$ . (2)
25. Find the area of a sector of a circle with radius 6 cm, if the angle of sector is  $60^\circ$ . (2)

#### Section – C

26. Prove that  $3 + 2\sqrt{5}$  is irrational. (3)
27. Find the zeros of the polynomial  $6x^2 - 3 - 7x$  and verify the relationship between the zeros and the coefficients. (3)
28. The sum of the digits of a two-digit number is 9. Also, nine times this number is twice the number obtained by reversing the order of the digits. Find the number. (3)
29. Show that the points  $(1,7)$ ,  $(4,2)$ ,  $(-1,-1)$  and  $(-4,4)$  are the vertices of a square. (3)
30. Find the coordinates of the points of trisection of the line segment joining the points  $A(2,-2)$  and  $B(-7,4)$ . (3)
- OR**
- Find the point on the  $x$  – axis which is equidistant from  $(2,-5)$  and  $(-2,9)$ .
31. A chord of a circle of radius 12 cm subtends an angle of  $120^\circ$  at the centre. Find the area of the corresponding segment of the circle. (Use  $\pi = 3.14$  and  $\sqrt{3} = 1.73$ ) (3)



A brooch is made with silver wire in the form of a circle with diameter 35 mm. The wire is also used in making 5 diameters which divide the circle into 10 equal sectors as shown in figure.  
 Find : (i) the total length of the silver wire required.  
 (ii) the area of each sector of the brooch.

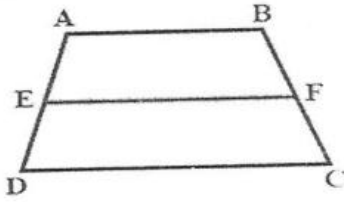
### Section - D

32. Six years hence a man's age will be three times the age of his son and three years ago he was nine times as old as his son. Find their present ages. (5)

OR

In a given fraction, if the numerator is multiplied by 2 and the denominator is reduced by 5, we get  $\frac{6}{5}$ . But if the numerator of the given fraction is increased by 8 and the denominator is doubled we get  $\frac{2}{5}$ . Find the fraction. (5)

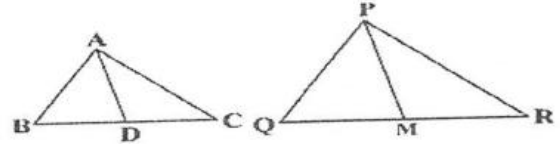
33.



In the given figure ABCD is a trapezium with  $AB \parallel DC$ . E and F are points on non-parallel sides AD and BC respectively, such that EF is parallel to AB. Show that  $\frac{AE}{ED} = \frac{BF}{FC}$  (5)

OR

Sides AB and BC and median AD of a triangle ABC are respectively proportional to the sides PQ and QR and median PM of  $\triangle PQR$ . Show that  $\triangle ABC \sim \triangle PQR$ .

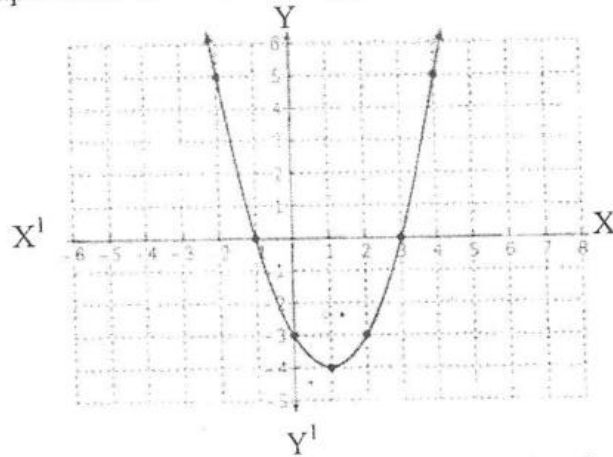


34.  $\frac{\tan A}{(1 - \cot A)} + \frac{\cot A}{(1 - \tan A)} = (1 + \tan A + \cot A)$  (5)

35. One card is drawn from a well-shuffled deck of 52 cards. Find the probability of getting  
 (i) a king of red suit.  
 (ii) a queen of black suit.  
 (iii) a jack of hearts.  
 (iv) a red face card.  
 (v) an ace. (5)

### Section - E

36. Due to heavy storm an electric wire got bent as shown in the following figure. It followed a mathematical shape. Answer the following questions :

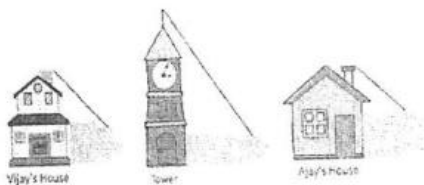


- (i) Write the standard form of the polynomial representing the wire. (1)  
 (ii) What are the zeros for the polynomial representing the shape of the wire. (1)  
 (iii) What is the value of the polynomial at  $x = -1$ . (2)

OR

What is the expression of the polynomial representing the wire?

37. Vijay is trying to find the height of a tower near his house. The height of Vijay's house is 20 m when Vijay's house casts a shadow of 10 m long on the ground. At the same time, the tower casts a shadow 50 m long on the ground and the house of Ajay casts 20 m. shadow on the ground. On the basis of this information, answer the following questions :

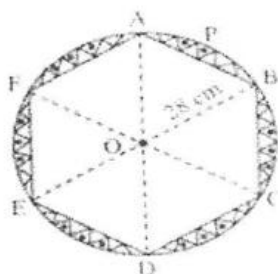


- (i) What is the height of the tower? (1)  
 (ii) Using which concept of mathematics can the height of the tower be found? (1)  
 (iii) What will be the length of the shadow of the tower when Vijay's house casts a shadow of 12 m? (2)

OR

What is the height of Ajay's house?

38.



- Aarushi's mother is making a table cover for a round table. Aarushi painted a design on it. It has six equal designs as shown in figure. The radius of the cover is 28 cm. Taking  $\sqrt{3} = 1.73$ . Answer the following :  
 (i) In figure what is the measure of  $\angle AOB$ ? (1)  
 (ii) What is the area of  $\triangle AOB$ ? (1)  
 (iii) What is the area of 1 design? (2)

OR

What is the area of sector OAPB is?





**General Instructions:**

- The question paper consists of 39 questions in 3 Sections : Section A – Physics, Section – B Chemistry & Section – C Biology.
- All questions are compulsory. However internal choice is provided in some questions. A student is expected to attempt only one out of these questions.
- 20 objective type questions carrying 1 mark each. Students have to write correct option and answer both.
- 6 very short answer questions carrying 02 marks each. Answer to these questions should be in the range of 30 to 50 words.
- 7 short answer questions carrying 03 marks each. Answer to these questions should be in the range of 70 to 80 words.
- 3 long answer questions carrying 05 marks each. Answer to these questions should be in the range of 80 to 120 words.
- 3 source – based/ case – based unit of assessment of 04 marks each with sub parts.
- For assertion and reasoning questions options are :**
  - Assertion (A) and Reason (R) both are true, and Reason is the correct explanation of Assertion.
  - Assertion (A) and Reason (R) both are true, but Reason is not the correct explanation of Assertion.
  - Assertion is true but Reason is false.
  - Assertion is false but Reason is true.

**SECTION – A : PHYSICS (27 Marks)**

- Variable focal length of eye lens is responsible for  
 (A) accommodation of eye (B) persistence of vision  
 (C) colour blindness (D) least distance of distinct vision. (1)
- In order to obtain a magnification of, -0.6 (minus 0.6) with a concave mirror, the object must be placed  
 (A) At the focus (B) Between pole and focus  
 (C) Between focus and center of curvature (D) Beyond the center of curvature (1)
- Assertion (A) :** A person suffering from myopia cannot see the distant objects clearly.  
**Reason (R) :** A converging lens is used for the correction of myopic eye as it can form real as well as virtual images of the objects placed in front of it. (1)
- Which of the following is not caused by the atmospheric refraction of light?  
 (A) twinkling of stars at night  
 (B) sun appearing higher in the sky than it actually is  
 (C) sun becoming visible two minutes before actual sunrise  
 (D) sun appearing red at sunset (1)
- A concave lens forms the image of an object which is:  
 (A) Virtual inverted and diminished (B) Virtual upright and diminished  
 (C) Virtual inverted and enlarged (D) Virtual upright and enlarged (1)
- Manju has two convex lenses A and B made of same material. A is thinner while B is thicker. She is looking at printed text using lens A, she noticed that when she slowly takes the lens away from the page, the text turns upside down when the lens crosses a distance of 10cm from the page.  
 (a) What characteristic of lens A does the distance 10cm signify?  
 (b) If Manju does the same with lens B, at what distance will the inversion of the image happen – less than, equals to or more than 10cm? Justify your answer. (2)
- State the role of ciliary muscles in human eye. What is accommodation? (2)  
**OR**  
 Name the part of the human eye –  
 (a) Which controls the amount of light entering the eye?  
 (b) Determine the colour of the eye?  
 (c) Transmit visual information from eye to brain?  
 (d) Light sensitive screen contains cells used to detect dim light? (2)
- (a) What do you understand by scattering of light?  
 (b) How does the size of scattering particles and wavelength of light affect the scattering? (1+2)

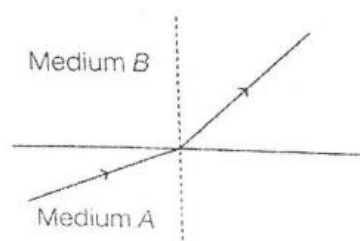
09. A student has three concave mirrors A, B & C of focal length 30cm, 20 cm and 10cm, respectively. For each concave mirror, he performs the experiment of image formation for three values of object distance of 30cm, 10cm and 20cm.

- (a) For the three object distances, identify the mirror which will form an image equal in size to that object. Also write the object distance.  
 (b) For mirror B, draw a ray diagram for image formation for object distance 20cm and 10cm. (1+2)

10. Define: (a) Absolute Refractive index  
 (b) Principal focus of a concave lens  
 (c) Power of a lens (3)

11. (a) Draw a ray diagram showing refraction of light through a rectangular glass slab. Mark the following in the diagram (a) lateral displacement (b) angle of incidence (c) angle of refraction (d) angle of emergence.

- (b) A light ray enters from medium A to medium B as shown in figure.



- (i) Which of the two medium is denser with respect to other medium? justify your answer.  
 (ii) Speed of light in medium A is  $V_a$  and in medium B is  $V_b$ , what is the refractive index of medium B with respect to medium A? (3+2)

OR

- (a) Show by completing the ray diagram.  
 (i) A ray of light falls parallel to principal axis on a convex lens.  
 (ii) A ray of light passing through principal focus of a concave lens.  
 (b) A student wants to project the image of a candle flame on the wall of a school laboratory by using a mirror.  
 (i) Which mirror he will use and why?  
 (ii) At what distance in term of focal length  $f$  of the mirror, should he place the candle flame to get the magnified image on the wall?  
 (iii) Draw a ray diagram to show formation of image in this case. (2+3)

12. Rainbows are formed when sunlight is scattered from raindrops into the eyes of an observer. Most raindrops are spherical rather than the often depicted 'teardrop' shape and it is this spherical shape that provides the conditions for a rainbow to be seen. The position of the sun and the raindrops in relation to the observer need to be just right for a rainbow to form:

- The sun needs to be behind the viewer
- The sun needs to be low in the sky, at an angle of less than  $42^\circ$  above the horizon. The lower the sun in the sky the more of an arc of a rainbow the viewer will see
- Rain, fog or some other source of water droplets must be in front of the viewer

The size of the raindrops does not directly affect the geometry of a rainbow, but mist or fog tends to disperse the effect more.

Rainbows only appear semi-circular over level ground at sunrise or sunset, when the sun is exactly on the horizon, the majority of the time a smaller segment of an arc is seen.

Based on the above information answer the following questions.

- (a) In the morning time we can see rainbow in which direction? Specify North, South, East or West. (1)  
 (b) What is cause of the dispersion of light? (1)  
 (c) Draw the ray diagram for formation of rainbow in sky and name the sequence of phenomenon that takes place. (2)

OR

In dispersion of light by glass prism which colour light deviates the least and which colour light deviates the most? (2)



**Section – B : Chemistry (26 Marks)**

13. Which of the following metals fails to evolve hydrogen gas with dilute HCl?  
(A) Zinc (B) Iron (C) Gold (D) Aluminium (1)
  14. Which acid is present in the stings of bees and ants?  
(A) acetic acid (B) nitric acid (C) oxalic acid (D) formic acid (1)
  15. An element common to all acids is:  
(A) Hydrogen (B) Chlorine (C) Nitrogen (D) Carbon. (1)
  16. On heating Iron (II) sulphate crystals, one would get:  
(A) sweet smell (B) rotten egg smell  
(C) irritating smell of burning sulphur (D) no smell (1)
  17. A few drops of aqueous NaOH are dropped on a pH paper. The colour of the pH paper will turn to:  
(A) violet (B) green (C) black (D) yellow (1)
  18. The difference of the molecules of water in gypsum and plaster of Paris is:  
(A) 5/2 (B) 2 (C) 1/2 (D) 3/2 (1)
  19. Hydrogen gas:  
(A) is colorless (B) is odourless (C) burns with a blue flame (D) all options are correct (1)
  20. **Assertion (A) :** Decay of teeth is due to the decrease in pH in the mouth.  
**Reason (R) :** Acids which released slowly in the mouth, destroy the enamel coating which protects teeth. (1)
  21. **Assertion (A) :** Copper can displace silver from aqueous silver nitrate solution.  
**Reason (R) :** Silver is placed above copper in the reactivity series of metals. (1)
  22. Explain the following in terms of gain or loss of oxygen with one example each  
(a) oxidation (b) reduction. (2)
  23. Which types of reactions are represented by the following equations?  
(a)  $CaO + CO_2 \rightarrow CaCO_3$   
(b)  $Mg + CuSO_4 \rightarrow MgSO_4 + Cu$   
(c)  $2NH_3 \rightarrow N_2 + 3H_2$  (3)
- OR**
- When you mix solutions of Lead (II) nitrate and Potassium iodide,
- (a) What is the colour of the precipitate formed? Name the compound involved.
  - (b) Write a balanced chemical equation for the reaction.
  - (c) Is this a double displacement reaction?
24. Five solutions A, B, C, D and E when tested with universal indicator show pH as 4, 2, 12, 7 and 9 respectively. Which solution is:  
(a) neutral (b) strongly alkaline (c) strongly acidic (d) weakly alkaline  
(e) weakly acidic?  
(f) arrange the pH in increasing order of hydrogen ion concentration. (3)
  25. (a) What is neutralisation reaction? Give two examples.  
(b) Write one use each of baking soda and washing soda. (5)
- OR**
- (a) Why is respiration considered an exothermic reaction? Write equation to support your answer.
  - (b) Why do we apply paint on iron articles?
  - (c) Oil and fat containing food items are filled with nitrogen gas. Why?
26. Sodium hydroxide or caustic soda is an useful industrial chemical and is manufactured by chlor-alkali process. In the process, a gas X is formed as the by-product. It reacts with slaked lime to give a compound Y which finds application as a bleaching agent for the clothes.  
(a) Name the gas X and the compound Y formed.  
(b) Which is the main raw material for the process?  
(c) Write the chemical equation involved in this process. Also write one use of the alkali produced in the reaction.
- OR**
- (c) How is compound Y formed from gas X ? Write the chemical equation involved. (1+1+2)

**Section – C : Biology (27 Marks)**

27. Which nerves transmit impulses from the central nervous system towards muscle cells?  
(A) Sensory nerves (B) Motor nerves (C) Relay nerves (D) Cranial nerves (1)
28. Identify which of the following statements about thyroxine is incorrect?  
(a) Thyroid gland requires iodine to synthesize thyroxine.  
(b) Thyroxine is also called thyroid hormone.  
(c) It regulates protein, carbohydrates and fat metabolism in the body.  
(d) Iron is essential for the synthesis of thyroxine. (1)
29. Which of the following is the correct sequence of body parts in the human alimentary canal?  
(a) Mouth → stomach → small intestine → large intestine → oesophagus  
(b) Mouth → oesophagus → stomach → small intestine → large intestine  
(c) Mouth → stomach → oesophagus → small intestine → large intestine  
(d) Mouth → oesophagus → stomach → large intestine → small intestine. (1)
30. Movement of sunflower in accordance with the path of Sun is due to  
(A) Chemotropism (B) Geotropism (C) Phototropism (D) Hydrotropism (1)
31. **Assertion (A) :** Animals can react to stimuli in different ways.  
**Reason (R) :** All animals have a nervous system and an endocrine system involving hormones. (1)
32. In which of the following groups of organisms are food materials broken down outside the body and absorbed?  
(A) Mushroom, green plants, amoeba (B) Yeast, mushroom, bread mould  
(C) Paramecium, amoeba, cuscuta (D) Cuscuta, lice, tapeworm (1)
33. If a plant is releasing carbon dioxide and taking in oxygen during the day does it mean that there is no photosynthesis occurring? Justify your answer. (2)
34. Why do arteries have thick and elastic walls whereas veins have valves? (2)
35. Name two types of neuron according to their function. How is the functioning of one is different from the other? (2)

**OR**

- (a) What is the role of cytokinin in plants? (2)
- (b) Where are auxins synthesized during positive phototropism and negative geotropism?
36. (a) Where do you find the respiratory pigments in human bodies?  
(b) Which point is common between aerobic and anaerobic respiration?  
(c) Why is the removal of faeces from the alimentary canal not considered to be excretion? (3)
37. (a) What is a reflex arc?  
(b) Draw a neat labelled schematic flowchart of reflex arc showing the components in an order (take any stimulus like pin prick/hot plate touching). (3)
38. (a) Name the basic filtration unit present in the kidney. How many of them are present in each kidney?  
(b) Draw the structure of such an unit & label – glomerulus, bowman's capsule, renal arteries, collecting duct  
(c) How do we control the urge to urinate? (5)

**OR**

- (a) How are the lungs designed in human beings to maximize the area for exchange of gases?  
(b) Schematically represent transport & exchange of oxygen & carbon dioxide in the blood circulatory system. (Label lungs, heart, blood vessels with proper direction of blood flow.)
39. **CASE STUDY BASED QUESTION** – Smita's father was complaining about frequent urination, pain in legs and a frequent weight loss to Smita's mother and she discussed the things with her daughter when Smita's mother returned from her school. Listening this, Smita said to her mother that her father should visit a doctor, who told her mother that her husband is having an elevated level of blood glucose. He should take care of his diet and should exercise regularly to maintain his normal glucose level.

**On the basis of given text, answer the following questions.**

- (i) Name the disease he is suffering from and name the hormone, whose deficiency causes it. (1)
- (ii) Identify the gland that secretes it and mention the endocrine function of it. (1)
- (iii) Explain, how the time and amount of secretion of this hormone is regulated in human system. (2)

**OR**

- (iii) What is the name of the mechanism that controls the secretion or stoppage of secretion of hormones. Does the gland in question has exocrine function? If yes what is that?



**General Instructions :**

1. Attempt all questions.
2. Answer 1 mark questions as directed.
3. Very short Answer Type Questions carry 2 marks each. Answer to each question should not exceed 40 words.
4. Short Answer Type Questions carry 3 marks each. Answer to each question should not exceed 60 words.
5. Long Answer Type Questions carry 5 marks each. Answer to each question should not exceed 120 words.
6. Case based questions with three sub questions carry 4 marks each. Answer to each question should not exceed 100 words.
7. Map based questions carry 5 marks with two parts, History (2 marks) and Geography (3 marks).
8. There is no overall choice in the question paper. However, an internal choice has been provided in a few questions. Only one of the choices in such questions has to be attempted.

**History and Civics – 40 Marks****Answer the following questions :**

01. There are two statements, marked as Assertion (A) Reason (R). Mark your answer as per the codes given below :

**Assertion (A) :** The prudential reasons stress that power sharing brings out better outcomes.

**Reason (R) :** Power sharing is the very spirit of democracy.

(1)

(A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).

(B) Both Assertion (A) and Reason (R) are true but Reason (R) is not the correct explanation of Assertion (A).

(C) Assertion (A) is correct, Reason (R) is wrong.

(D) Assertion (A) is wrong, Reason (R) is correct.

02. Which of the following matches is incorrect?

**Column 1****Column 2**

(a) Patriarchy

(i) a system that values men more and gives them power over women.

(b) Feminist

(ii) is a woman or man who believes in equal rights and opportunities for both women and men.

(c) Urbanisation

(iii) means a shift from one occupation to another in urban areas.

(d) Family laws

(iv) are those laws that deal with family related matters such as marriage, divorce, adoption, inheritance etc.

(A) (a) – (i)

(B) (b) – (ii)

(C) (c) – (iii)

(D) (d) – (iv)

(1)

03. Who from among the following have argued that, most of the victims of the communal riots in India are the people from the religious minorities?

(A) The Police

(B) The Human Rights groups

(C) The armed forces

(D) The media houses

(1)

04. Which of the following sets of subjects **doesn't** fit in the Concurrent List, provided by our Constitution?

(A) Irrigation and Communications

(B) Forests and Trade Unions

(C) Marriage and Adoption

(D) Succession and Education

(1)

05. Which of the following forms of power sharing arrangement is called a system of 'checks and balances'?

(A) Power sharing among different organs of government.

(B) Power sharing among different levels of government.

(C) Power sharing among different social groups.

(D) Power sharing among political parties.

(1)

06. What theme on which has the cartoon below been made ?



(A) Decentralisation of power

(B) Language Policy in India

(C) Reorganisation of the States in India

(D) Centre – State relations

(1)

Contd...2



07. What from among the following denotes, A direct vote by which all the people of a region are asked to accept or reject a proposal?  
(A) Referendum (B) Suffrage (C) Plebiscite (D) Conservatism (1)
08. Which of the following countries doesn't Belgium share its border with?  
(A) The Netherlands (B) Luxembourg (C) Switzerland (D) Germany (1)
09. There are two statements, marked as Assertion (A) Reason (R). Mark your answer as per the codes given below :

**Assertion (A) :** Gandhiji relaunched the Civil Disobedience Movement after returning to India from London, where he attended a conference.

**Reason (R) :** He was disappointed because the negotiation at the First Round Table Conference (1931) broke down. (1)

- (A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).  
(B) Both Assertion (A) and Reason (R) are true but Reason (R) is not the correct explanation of Assertion (A).  
(C) Assertion (A) is correct, Reason (R) is wrong.  
(D) Assertion (A) is wrong, Reason (R) is correct.
10. Where, from among the following, did the Tamils demand an independent Tamil Eelam, in Sri Lanka?  
(A) In the northern and eastern parts of Sri Lanka. (B) In the northern and western parts .  
(C) In the northern and southern parts. (D) In the northern and central parts. (1)
11. The portrayal of Bharat Mata, in which she is shown standing beside a lion and an elephant, holding a trident (trishul) was the work of which of the following?  
(A) Bankim Chandra Chattopadhyay (B) Raja Ravi Varma  
(C) Abanindra Nath Tagore (D) None of these (1)
12. Which of the following did not find a room in the collection of Rabindranath Tagore, for the growth of Indian nationalism?  
(A) Ballads (B) Novels (C) Myths (D) Nursery Rhymes (1)
13. Study the map thoroughly and answer the question that follows. (1+1=2)  
(a) Name the state (shaded on map), which was carved out of a bigger state to recognize differences based on geography, ethnicity and culture. (See the History/Civics map printed in the question paper.) (1)  
(b) Fear of what made our Central Government resist for sometime, the reorganization of Linguistic States? (1)
14. What two provisions given for the state government in the Belgian Constitution make Belgium an ideal federation ? (1+1=2)
15. Mention any two of the territorial provisions of the Treat of Vienna, 1815. (1+1) (2)  
OR  
Write any two characteristic features of the landed aristocracy in Europe. (1+1)
16. "The issue of extending political rights to women was a controversial one within the liberal movement in Europe." Explain how. (1+1+1=3)
17. What are the key features of a 'holding together' federation ? (1+1+1=3)
18. Why were the Awadh Peasants discontented? What ways did they adopt to solve their problems? (3+2) (5)  
OR  
What cultural elements played a prominent role in the making of nationalism in India? What did the nationalists do to develop a sense of collective belonging among the Indians? (1+4)
19. What is a sexual division of labour? In what different ways are the Indian women discriminated against in India. Explain any such four ways. (1+4) (5)  
OR  
How can you remove casteism from the Indian society? Suggest at least any five ways. (1+1+1+1+1)

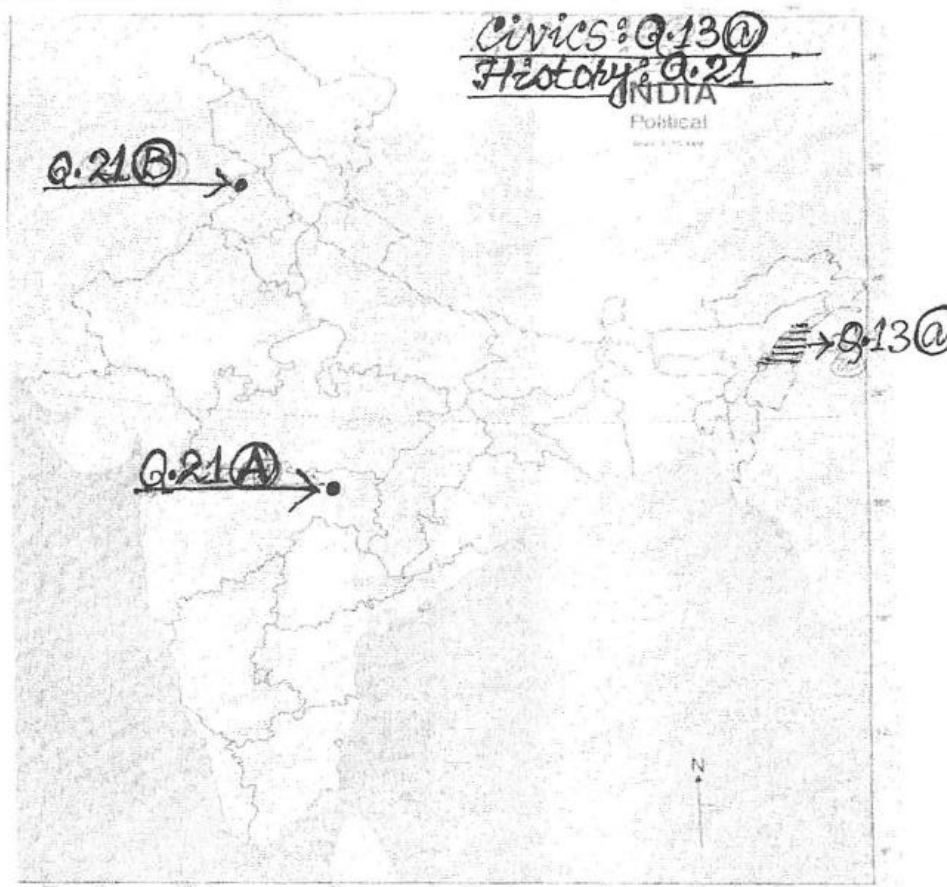
20. Read the paragraph given below and answer the questions that follow : (4)

Giuseppe Garibaldi (1807 – 1882) is perhaps the most celebrated of Italian freedom fighters. In 1833, he met Mazzini, joined the Young Italy movement and participated in a republican uprising in Piedmont in 1834. The uprising was suppressed and Garibaldi had to flee to South America, where he lived in exile till 1848. In 1854, he supported Victor Emmanuel II in his efforts to unify the Italian states. In 1860, Garibaldi led the famous Expedition of the Thousand to South Italy. Fresh volunteers kept joining through the course of the campaign, till their numbers grew to about 30,000. They were popularly known as Red Shirts.

In 1867 Garibaldi led an army of volunteers to Rome to fight the last obstacle to the unification of Italy, the Papal states where a French garrison was stationed. The Red Shirts proved to be no match for the combined French and Papal troops. It was only in 1870, when during the war with Prussia, France withdrew its troops from Rome that, the Papal States were finally joined to Italy.

- (a) Why did Garibaldi quit his association with Mazzini ? (1)  
 (b) Name the expedition led by Garibaldi in 1860. (1)  
 (c) (i) Boosted with whose support did the Papal states stay out of the unification of Italy? (1)  
 (ii) Why did France withdraw its troops from Rome ? (1) ] (2)

21. Identify and write the names of the two places marked as (A) and (B) on the given political map of India. (2)



- (A) The city where the INC held its session in December 1920. (1)  
 (B) The place where a massacre took place in April 1919. (Name the city.) (1)

### Geography – 20 Marks

22. **Assertion (A) :** Tiger population reduced rapidly in India from 55,000 to just 1827, in 1973.  
**Reason (A) :** 'Project Tiger' one of the well publicised wildlife campaigns in the world was launched in 1973.
- (A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).  
 (B) Both Assertion (A) and Reason (R) are true but Reason (R) is not the correct explanation of Assertion (A).  
 (C) Assertion (A) is correct, Reason (R) is wrong.  
 (D) Assertion (A) is wrong, Reason (R) is correct. (1)
23. Which one of the following was a technique to harvest rainwater in Jaisalmer?  
 (A) Bamboo drip irrigation system (B) 'Guls and Kuls'  
 (C) Inundation Channels (D) 'Khadins' (1)

24. Deforestation due to mining has caused severe land degradation in which one of the following states?  
(A) Odisha (B) Tamil Nadu (C) Kerala (D) Gujarat (1)
25. Explain how communities have taken measures for conservation of forests and wildlife in India. (1+1=2)
26. Explain three methods through which soil erosion can be controlled. (1+1+1=3)
27. Write five important characteristic features of plantation agriculture. (5)
- OR**
- Explain the institutional and technical reform programmes introduced by the government in the interest of the farmers. (**any five** points)
28. Read the source given below and answer the questions that follow :
- Multi-purpose projects launched after Independence with their integrated water resources management approach were thought of as the vehicle that would lead the nation to development and progress. Jawaharlal Nehru proudly proclaimed the dams as the 'temples of modern India'; The reason being that it would integrated development of agriculture with rapid industrialization and growth of the urban economy.
- In recent years, multi-purpose projects and large dams have come under great scrutiny and opposition for a variety of reasons. Narmada Bachao Andolan or Save Narmada Movement is a Non Governmental Organisation (NGO) that mobilized tribal people, farmers, environmentalists and human rights activists against the Sardar Sarovar Dam being built across the Narmada river in Gujarat.
- 28 (i) Why did Jawaharlal Nehru call the dams as 'temples of modern India'? (1)  
(ii) 'Narmada Bachao Andolan' movement was against which dam? (1)  
(iii) Explain any two reasons due to which multi-purpose projects and large dams came under opposition. (2)
29. On the given political outline map of India, locate and label any three of the following.  
(1) Salal dam (2) arid soil region  
(3) Largest Jute producing state (4) Indira Gandhi International Airport (3)

#### Economics – 20 Marks

30. Which one of the following bank in India controls the issuance of currency and regulates the credit system in the country?  
(A) Punjab National Bank (B) ICICI  
(C) Reserve Bank of India (D) State Bank of India (1)
31. Identify the reason as to why countries after resort to the use of currency as a medium of exchange instead of barter system. Choose the appropriate statement among the following options :  
(i) Currency eliminates the need for double coincidence of wants, unlike the barter system, facilitating smoother transactions.  
(ii) Currency allows for a more standardised measure of value and divisibility compared to goods traded in the barter system.  
(iii) Barter system limits the scope of trade, while currency promotes trade across a wider spectrum.  
(iv) Currency helps in reducing the risk and uncertainty involved in the valuation of goods traded, unlike the barter system.  
(A) Statements (i), (ii) and (iii) are appropriate.  
(B) Statements (ii), (i) and (iv) are appropriate.  
(C) All the statements are appropriate.  
(D) Only statement (iii) as appropriate. (1)
32. **Assertion (A) :** Kerala has low Infant Mortality Rate.  
**Reason (R) :** Kerala has adequate provision of basic health and educational facilities. (1)  
(A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).  
(B) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A).  
(C) Assertion (A) is correct, Reason (R) is wrong.  
(D) Assertion (A) is wrong, Reason (R) is correct.
33. Consider the following statements about exhaustion of natural resources.  
(i) Crude oil resources would last only for 50 years more.  
(ii) Oil extraction is undertaken by Middle East Region at a very fast pace.  
(iii) Non-Conventional fuel sources should be encouraged that reduces the use of crude oil.  
Which of the above statements gives an idea of sustainable development ?  
(A) Only (ii) (B) (i) and (ii) (C) Only (i) (D) Only (iii) (1)



34. The total number of children attending school as a percentage of total number of children in the same age group is called .....  
 (A) Net Attendance Ratio (B) Literacy Rate  
 (C) Gross Enrollment Ratio (D) Level of Education (1)

35. How is money used as a medium of exchange? Explain with example. (2+1)

**OR**

How do banks mediate between those who have surplus money and those who need money? (3)

36. What is Gross Domestic Product ? How do we count the various goods and services for calculating GDP? Explain with example. (1+1+1)

37. (i) Why is the Primary Sector also called the 'agriculture and allied sector'?  
 (ii) How can more employment be created in agriculture sector alone? (1+4)

**OR**

Ramesh works as a manager in a bank. In which sector is he working ? Describe any four features of the sector he is working in. (1+4)

38. **Read the given passage and answer the questions that follows :**

Ground water is an example of renewable resources. These resources are replenished by nature as in the case of crops and plants. However, even these resources may be over used. For example, in the case of ground water, if we use more than what is being replenished by rain then we would be overusing this resources. Non renewable resources are those which will get exhausted after a few years of use. We have a fixed stock on Earth which cannot be replenished. We do discover new resources that we did not know of earlier. New sources in this way add to the stock. However, over time, even this will get exhausted. (1+1+2=4)

- (i) Which of the following bests defines renewable resources?  
 (a) Resources that are limited and can not be replenished.  
 (b) Resources that are replenished by nature.  
 (c) Resources such as a fossil fuels that can be easily replaced.  
 (d) Resources that have a fixed stock and cannot be used sustainably.

- (ii) If a resource is over used beyond what nature replenishes, it falls under which category ?  
 (a) Renewable resources. (b) Non renewable resources.  
 (c) Sustainable resources (d) Excessive resources.

**OR**

How do new sources contributes to the stock of resources ?

- (a) They lead to the depletion of existing resources.  
 (b) The replenish non renewable resources.  
 (c) They add to the stock of non renewable resources.  
 (d) They aid in the sustainability of renewable resources.

- (iii) What distinguishes non renewable resources from renewable ones? (Any two points)

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# DELHI PUBLIC SCHOOL, BHILAI

Date : 09.09.2024

MIDTERM EXAMINATION 2024

Time : 50 Minutes

Class – X

SUBJECT : VIGYAN PAHELI

Max. Marks : 50

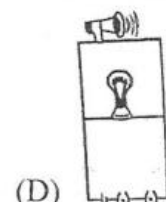
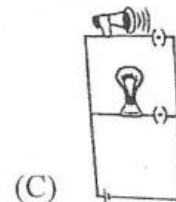
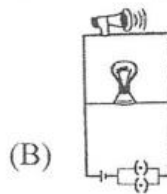
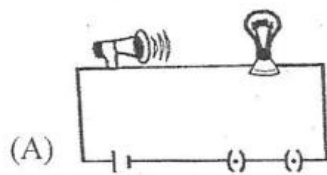
Name of the student: \_\_\_\_\_ Class/Sec. \_\_\_\_\_ Roll No. \_\_\_\_\_  
 Invigilator's Signature \_\_\_\_\_ Marks obtained : \_\_\_\_\_/50

## General Instructions:

- All questions are compulsory. Answer all the questions by writing the correct option number in the space provided in the capital letter only.
- The question paper consists of 3 pages.
- There are 50 questions of 1 mark each.

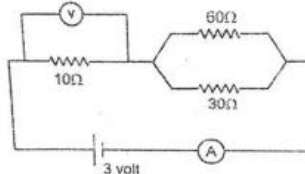
- (1) 1 conductance of superconductor is  
 (A) infinite (B) very large (C) very small (D) zero □

- (2) In the house of a person who is weak of hearing, a light bulb is also glow when somebody rings the doorbell. The bell can be operated both from the garden gate and from the door of the house. Select the correct possible circuit required.



□

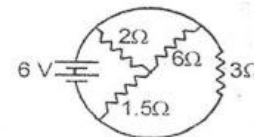
- (3) In the circuit shown reading of the ammeter and voltmeter are respectively



- (A) 0.1A, 3 V (B) 0.1A, 1 v (C) 0.3A, 3V (D) 0.3A, 1v □

- (4) The total current supplied to the circuit by the batter is

- (A) 1A (B) 2A (C) 4A (D) 6A



□

- (5) On a bulb the rating is written as 220V, 60W. Find out the resistance of the bulb and the value of current drawn through it.

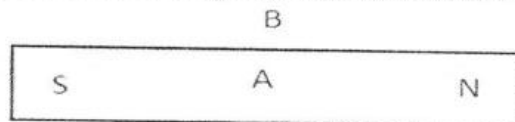
- (A) 806.66  $\Omega$  / 0.27A (B) 500  $\Omega$  / 2A (C) 200  $\Omega$  / 4A (D) 100  $\Omega$  / 1A □

- (6) Current is induced in a coil by electromagnetic induction when-

- (A) Only the coil moves in the magnetic field  
 (B) Only the magnet moves towards the coil.  
 (C) Coil and the magnet move with respect to each other.  
 (D) None of the above. □

- (7) Two thin long parallel wires, separated by a distance d carries a current I in the same direction. They will –  
 (A) Attracts each other (B) repel each other (C) depends on the material of wire (D) Can't say □

- (8) The direction of magnetic field in case of a bar magnet at point A and B are



- (A)  $\leftarrow$  at A and  $\rightarrow$  at B (B)  $\leftarrow$  at A and  $\leftarrow$  at B (C)  $\rightarrow$  at A and  $\rightarrow$  at B (D)  $\rightarrow$  at A and  $\leftarrow$  at B □

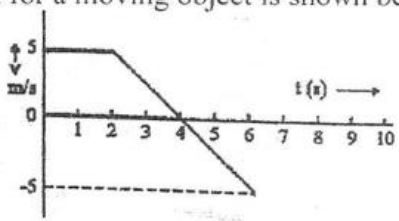
- (9) The linear magnification for a mirror is the ratio of size of image to size of object, and is denoted by m. Then magnitude of magnification is equal to (symbols have their usual meaning)

- (A)  $\frac{uf}{u-f}$  (B)  $\frac{uf}{u+f}$  (C)  $\frac{f}{u-f}$  (D) none of these. □

- (10) Two thin lens of focal length 20cm and 25cm are placed in contact. The effective power of the combination is:

- (A)  $\frac{1}{9}$ D (B) 45D (C) 6D (D) 9D □



- (11) Masses of the two bodies are 1kg and 2kg respectively. If their kinetic energies are 1J and 2J respectively. The ratio of their momentum will be  
 (A) 1:1 (B) 1:4 (C) 4:1 (D) 1:2
- (12) A sound wave has frequency 1000Hz and wavelength 33cm. How long will it take to move through 1km?  
 (A) 6.06s (B) 3.03s (C) 9.09s (D) 10s
- (13) A device that converts the electrical energy to mechanical energy is called as  
 (A) Dynamo (B) electromagnet (C) electric motor (D) generator
- (14) The moon is at a distance of  $4 \times 10^8$  m from the earth. A radar signal is transmitted from the earth with a speed of  $3 \times 10^8$  m/s will reach the moon in about -  
 (A) 2.6s (B) 1.3s (C) 5.2s (D) 6.5s
- (15) The velocity time graph for a moving object is shown below. What would be the total displacement during time  $t = 0$  to  $t = 6$ s?  

(A) 10m (B) 20m  
(C) 2.5m (D) 0m
- (16) In the reaction  

$$\text{Zn} + \text{FeSO}_4 \rightarrow \text{ZnSO}_4 + \text{Fe}$$
 (A) Zn gets oxidized. (B) Fe gets oxidized  
 (C) Zn is an oxidizing agent. (D) Zn and Fe are both oxidized.
- (17) The chemical formula of Ferric oxide is:  
 (A) FeO (B) FeO<sub>2</sub> (C) Fe<sub>2</sub>O<sub>3</sub> (D) Fe<sub>2</sub>O
- (18) In the electrolysis of water, anode:  
 (A) has positive charge (B) has negative charge  
 (C) is connected to negative terminal of the battery (D) none of these is correct.
- (19) Aluminum oxide reacts with sulphuric acid to form:  
 (A) Aluminum sulphate and water (B) Aluminum sulphate and hydrogen gas,  
 (C) Aluminum sulphate and oxygen gas (D) Aluminum sulphate and Sulphur dioxide.
- (20) To show that iron is more reactive than copper, the correct procedure is to:  
 (A) prepare ferrous sulphate solution and dip copper strip in it,  
 (B) prepare copper sulphate solution and dip iron strip in it,  
 (C) add dilute nitric acid on both the strips,  
 (D) heat iron and copper strips both.
- (21) Which color will be acquired by an aqueous solution of ammonium hydroxide when a few drops of phenolphthalein indicator are added to it?  
 (A) Yellow (B) Orange (C) Red (D) Pink.
- (22) When aqueous solutions of an acid and alkali are mixed:  
 (A) no reaction occurs (B) a new acid and a new base are formed,  
 (C) a salt and water are formed (D) an acid and a salt are formed.
- (23) The two colors seen at the two extreme ends of the pH chart are:  
 (A) Red and violet (B) Red and green (C) Green and blue (D) Orange and green
- (24) The pH of lemon juice is:  
 (A) Zero (B) less than 7 (C) equal to 7 (D) more than 7.
- (25) Plaster of Paris is made from:  
 (A) quicklime (B) slaked lime (C) gypsum (D) limestone
- (26) To protect tooth decay, one is advised to brush the teeth regularly. The ingredient of the toothpaste which checks the tooth decay is:  
 (A) acidic. (B) basic (C) neutral (D) none of the above.
- (27) The number of molecules of water of crystallization present in Green vitriol are:  
 (A) 7 (B) 5 (C) 4 (D) 10.
- (28) Which can be beaten into thin sheets:  
 (A) Copper (B) Phosphorus (C) Sulphur (D) Sodium.

- (29) Which of the following is an amphoteric oxide?  
 (A) Sodium oxide (B) Magnesium oxide (C) Aluminum oxide (D) Calcium oxide. ☐
- (30) Aqua regia is a mixture of *conc. HCl* and *conc. HNO<sub>3</sub>* in the ratio of:  
 (A) 1:1 by volume (B) 2:1 by volume (C) 1:3 by volume (D) 3:1 by volume ☐
- (31) Aerobic respiration requires which of the following in a cell?  
 (a) Ribosomes (B) Mitochondria (C) Chloroplast (D) Endoplasmic reticulum ☐
- (32) Which of the following is a birth hormone?  
 (A) Prolactin (B) Progesterone (C) Oxytocin (D) ADH ☐
- (33) Which hormone is better known as fight or flight hormone?  
 (A) Adrenaline (B) Aldosterone (C) Cytosine (D) Vasopressin ☐
- (34) The hormone insulin is secreted by –  
 (A) Liver (B) Pancreas (C) Gall bladder (D) Small intestine ☐
- (35) Q5) The heart is four chambered in which of the following organism?  
 (A) Lizard (B) Snake (C) Turtle (D) Vulture ☐
- (36) The blood in humans is red because of –  
 (A) Presence of hemoglobin in RBC. (B) Presence of hemoglobin in plasma  
 (C) Presence of hemocyanin (D) Presence of lymphocytes. ☐
- (37) Dialysis fluid contain all the constituents as in plasma except-  
 (A) Glucose (B) NaCl (C) Amino acids (D) Urea ☐
- (38) Which of the following gland grows to the maximum size at puberty and then diminishes gradually?  
 (A) Thymus (B) Pituitary (C) Thyroid (D) Adrenal ☐
- (39) Which of the following is not secreted in females?  
 (A) Progesterone (B) Estrogen (C) Testosterone (D) Thyroxine ☐
- (40) In old age, the vision of eye becomes dim it is due to-  
 (A) Myopia (B) Hypermetropia (C) Cataract (D) Astigmatism ☐
- (41) The vomiting center is situated in-  
 (A) Medulla (B) Cerebrum (C) Cerebellum (D) Hypothalamus ☐
- (42) The receptors present in tongue are known as –  
 (A) Olfactoreceptors (B) Photoreceptor (C) Gustatoreceptors (D) Photoreceptors ☐
- (43) A zygote which has an X chromosome inherited from the father will develop into a-  
 (A) Boy (B) Girl  
 (C) Either boy or girl (D) X chromosome does not determine the sex of the child. ☐
- (44) Some dinosaurs had feathers although they could not fly but birds have feathers that help them to fly, In the context of evolution this means that-  
 (A) Reptiles have evolved from birds.  
 (B) There is no evolutionary connection between reptiles and birds.  
 (C) Feathers are homologous structures in both the Organism.  
 (D) Birds have evolved from reptiles. ☐
- (45) A cross between a tall pea plant and a short pea plant resulted in progeny that were all tall plants because –  
 (A) Tallness is a dominant trait. (B) Shortness is the dominant trait.  
 (C) Tallness is a recessive trait. (D) Height of the pea plant is not governed by the gene T o t. ☐
- (46) Which armed force first female camel riding squad is ready?  
 (A) Indo Tibetan Border Police (B) Assam Rifles  
 (C) Central Industrial Security Force (D) Border Security Force. ☐
- (47) Which of the actors has published the book named “Muskurate Chand Lamhe aur Kuchh Khamoshiyan”?  
 (A) Manoj Bajpayee (B) Sharukh Khan (C) Rajnikant (D) None of these ☐
- (48) Who has released a new digital publication ‘BLO e-Patrika’?  
 (A) Election Commission of India (B) Delhi Police (C) Niti Aayog (D) CSIR ☐
- (49) When is National Sports Day celebrated in India?  
 (A) 22 August (B) 29 August (C) 21 August (D) 25 August ☐
- (50) Nuakhai festivals is celebrated in which states?  
 (A) Odisha & Jharkhand (B) Odisha & Chhattisgarh  
 (C) Chhattisgarh & Jharkhand (D) All of the above ☐



**General Instructions:**

This question paper is divided into **three sections** namely A, B and C. Please read instructions in each section carefully.

**Section A** is of 24 marks. Each question is of 1 mark. **Section B** is of 18 marks. Each question is of 2 marks.

**Section C** is of 8 marks. Each question is of 4 marks.

All questions of a particular section must be attempted in the correct order.

**Section – A****I. Answer any 4 questions out given 6 questions.****(1x4=4)**

1. Why does a good sleep plays an important role?  
(A) Spend quality time with family (B) Rejuvenates body  
(C) Motivates you (D) All of these
2. Which one of the following is increased by healthy eating and physical activities which are extremely important in self management skills.  
(A) Mind and body power (B) Weight (C) Speaking power (D) Driving skill
3. Which of the following are types of motivation?  
(A) Internal (B) Intermediate (C) External (D) Both (A) and (C)
4. Which of these are examples of positive feedback?  
(A) Good work (B) You can draw better  
(C) Some points are missing (D) You need to work with dedication
5. Which of the following feedback follows a predefined format?  
(A) Negative (B) Descriptive (C) Specific (D) Formal
6. Which of the following is not a communication barrier?  
(A) Linguistic barrier (B) Interpersonal barrier  
(C) Financial barrier (D) Organisational barrier

**II. Answer any 7 questions out given 9 questions.****(1x7=7)**

1. A company used a system for recruitment, creating a situation in which many eligible women were left out of the consideration. What is this known as?  
(A) Misinterpretation of data (B) Problem of inclusion  
(C) Gender bias (D) Data privacy
2. Artificial Intelligence is .....  
(A) the science and engineering of making intelligent machines  
(B) a technique of getting machines to work  
(C) the choices that we get may be big or small  
(D) both a & b
3. Which of the following is the most common application of AI used by e-commerce websites for customer support?  
(A) Price filter (B) Chat-bot (C) Buying suggestions (D) All of these
4. .... is a domain of AI that depicts the capability of a machine to get and analyse visual information and afterwards predicts some decisions about it.  
(A) NLP (B) Data Sciences (C) Augmented Reality (D) Computer vision
5. Which of the following stands for NLP?  
(A) Natural logic processing (B) Neutral logic programme  
(C) Neutral language process (D) Natural language processing
6. The basis of decision making depends upon:  
I. Availability of information  
II. Past experience  
III. Positive attitude  
IV. Self awareness  
(A) I & II (B) II & IV (C) I, II & IV (D) I,II & III
7. Price comparison websites are related to which domain of AI:  
(A) Artificial Intelligence (B) Machine Learning  
(C) Deep Learning (D) Data Science
8. Unscramble the letters and find the correct answer DATA+..... = AI machines.  
(A) SMEGSEA (B) IMLHOMRGAT (C) RROER (D) TSMMCOE
9. .... is a domain of AI related to data systems and processes, in which the system collects numerous data, maintenance data sets and derives meaning out of them.  
(A) NLP (B) Data Science (C) Computer Vision (D) Augmented Reality



**III. Answer any 9 questions out given 11 questions.**

(1x9=9)

1. Which of the following refers to "Where" among 4W Canvas?  
(A) Stakeholders (B) Nature of the problem  
(C) Context/Situation/location (D) Solution or benefits to the stakeholders
2. Which of the following refers to the type of data you want to collect?  
(A) Training data (B) Model data (C) Testing data (D) Data features
3. Which of the following is an example of unsupervised learning model?  
(A) Regression (B) Clustering (C) Classification (D) Rule based
4. Which of the following is not a technique of data exploration?  
(A) Bar chart (B) Pie chart (C) Google survey (D) Tally table
5. In which of the following the machine is trained with huge amount of data which helps it in training itself around the data?  
(A) Deep learning (B) Machine learning (C) AI (D) NLP
6. A business problem wherein we categorize whether an observation is "Safe", "AtRisk" or "Unsafe" is an example of:  
(A) Classification (B) Clustering (C) Regression (D) Dimensionality Reduction
7. An unsupervised learning data model works on which kind of data?  
(A) Training (B) Unlabelled (C) Testing (D) Labelled
8. Which of the following model work on continuous data like whether analysis, forecasting, stock prices etc.?  
(A) Clustering (B) Classification (C) Regression (D) Perfect models
9. What are the two types of unsupervised learning model?  
(A) Clustering and dimensionality reduction (B) Classification and regression  
(C) Rule based and learning model (D) Classification and clustering
10. Which of the following is part of problem scoping?  
(A) System mapping (B) Data features (C) Web scraping (D) 4Ws problem canvas
11. Which of the following do not belong to the learning-based approach of AI modelling?  
(A) Supervised learning (B) Unsupervised learning  
(C) Modular learning (D) Reinforcement learning

**IV. Answer any 4 questions out given 6 questions.**

(1x4=4)

1. What does CSV stand for?  
(A) Comma Separated Values (B) Common Selected Values  
(C) Common Significant Values (D) Comma Section Variables
2. Which of the following is used for data analysis and calculation related to large numerical data sets?  
(A) Pandas (B) NumPy (C) Packages (D) Modules
3. Which among the following is the most frequent value in a given dataset?  
(A) Mean (B) Median (C) Mode (D) Variance
4. Which of the following is the measure of dispersion of a set of data from its mean?  
(A) Mean (B) Mode (C) Variance (D) Standard deviation
5. The ..... the dispersion of the data, the greater is the standard deviation?  
(A) Higher (B) Lower (C) Equal (D) Not equal
6. Which of the following means how far each number in the given dataset is from the mean value?  
(A) Mean (B) Median (C) Variance (D) Mode

**Section – B**

**V. Answer any 3 questions out given 4 questions.**

(2x3=6)

1. Give any two measures to overcome barriers to effective communication.
2. What is writing?
3. What are the four factors that affect self-confidence?
4. What are the advantages of working independently? Write any four.

**VI. Answer any 2 questions out given 3 questions.**

(2X2=4)

1. Name two possible areas where the use of AI can lead to unemployment.
2. How do machines become intelligent?
3. Explain the two important words that make up the term artificial intelligence.

**VII. Answer any 2 questions out given 3 questions.**

(2X2=4)

1. Name all the stages of AI Project cycle.
2. What precautions to be taken while acquiring data for developing an AI Project?
3. Write four important features of neural networks.

**VIII. Answer any 2 questions out given 3 questions.**

(2X2=4)

1. Explain the term Outliers Data. Give an example.
2. What type of data can be used by Pandas?
3. Why is KNN called a lazy learner algorithm?

**Section C:**

**IX. Answer following questions.**

(4X2=8)

1. Define the following terms.  
(a) Data Privacy (b) AI Access

**Or**

Write two application areas in which data science can be used.

2. What are sustainable development goals?

**Or**

What is Evaluation? Describe the process involved in it.